California MEDICINE

MARCH, 1948

OFFICIAL JOURNAL
OF THE CALIFORNIA MEDICAL ASSOCIATION

UME 68 NUMBER 3

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OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION

VOL. 68 MARCH, 1948 NO. 3

Cardiac Calcifications, Annular and Valvular (Leaflet)

CHARLES E. GRAYSON, M.D., *Sacramento*

THE cause of calcareous deposits in the heart valves, either in the leaflets or in the supporting fibrous ring, has been in dispute since Monckeberg's [8] classic description and indication that sclerocalcific and rheumatic changes should be differentiated. Some authors denote aortic calcareous disease as a distinct entity.[5,10,21] Others differentiate between rheumatic and non-rheumatic disease.[3,4,10,12,15,16] Still others feel that all are on a rheumatic basis.[2,6,7,19] Recent studies by Ashworth [1] give considerable weight to the atherosclerotic basis. Ashworth presents the sites of predilection and the factors influencing the production of calcareous deposits.

There appears to be less controversy over the cause of calcareous deposits in the mitral region than in the aortic region. This seems reasonable, if one considers the greater size of the mitral orifice and valve leaflets. Therefore, annular calcifications are distinguishable from leaflet calcifications with greater ease. In either case, early leaflet calcification can be distinguished fluoroscopically from annulus calcifications by conformation and motion.

The differentiation of the location in the annulus or leaflets is of some importance in diagnosis and in prognosis.[2,4,10,14,15,23,27] Proper studies of these calcifications depend on fluoroscopic examination as well as radiographic examination.

Ideally, fluoroscopic examination, for any purpose, should include examination of the lungs and heart. Older patients, and those suspected of heart disease, should have the added search for cardiac calcifications [19] included routinely. Such a search usually consumes only a few seconds of time with the patient in the oblique positions. That the *search* is essential is illustrated by the fact that 70 per cent of those calcifications found in one hospital were seen within a one-year period and 60 per cent by one fluoroscopist. Since so many of these calcifications are not noted during routine fluoroscopy or during fluoroscopy of the heart, the importance of searching for intracardiac calcium deposits should be reemphasized. Greater diagnostic accuracy [10,22] is attained in known and even in unsuspected heart disease.

Fluoroscopy most easily differentiates syphilitic aortic incompetency from aortic calcareous valvular disease. The location of calcareous deposits substantiates clinical diagnosis and helps to indicate the extent and severity of the disease.

Since the first radiographic demonstration of the intracardiac calcifications, in a living individual in 1902,[13] there have been improvements in fluoroscopic equipment and radiographic apparatus. These improvements permit much more detailed studies of these calcium deposits. Such moving shadows can now be demonstrated quite well on film. The technique of fluoroscopy has been well described by Sosman [19] and criteria for special search outlined by him and others.[15] The location and the identification of intracardiac calcifications have been presented also. Incidentally, the study of the motion of these calcifications in living persons has added to the understanding of cardio-dynamics.[9,11,20,26]

Data on those cases seen at the San Francisco City and County Hospital in a four-year period are summarized in Table 1. Several cases seen on the same service and already reported elsewhere [14,15,24,25] are included for statistical reasons. Different age and sex incidence reported by others [3,4,6,10,16,17] may reflect differences in their material as well as the amount of attention given calcifications incidentally in routine examinations.

There are several noteworthy findings. The average age of females with calcifications is consistently

Read before the sections on Radiology, General Medicine, General Surgery, and General Practice at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

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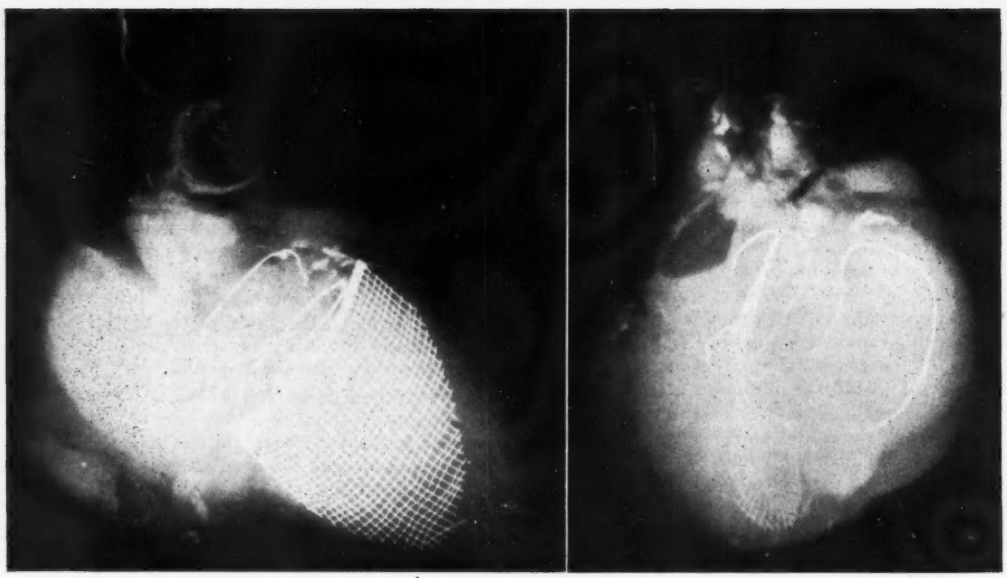
TABLE 1.

Calcium	No.	Sex M.	Sex F.	Age (Av.)	R.F.	S.	H.	CA	CB	EKG N.	EKG A.	M
Aortic leaflets	16	13		55	4	2	4	3	1	2	10	16
			3	58								
Aortic ring	9	5		67	0	2	1	4	1	1	3	9
			4	64								
Mitral leaflet	5	3		41	5	0	1	0	0	0	5	5
			2	49								
Mitral ring	30	13		67	3	3	14	16	8	3	15	15
			17	71								
Aortic and mitral rings	7	3		65	2	1	4	5	3	0	7	7
			4	73								
Between aortic and mitral areas (Septal)	2		2	80	0	0	1	....	....	0	2	1

R.F.—History of rheumatic fever. S.—Syphilis. H.—Hypertension. CA.—Visible calcification in other arteries. CB.—Visible calcification in bronchial tree. N.—Normal electrocardiograph. A.—Abnormal electrocardiograph. M.—Murmur present.

greater than that of males, except in the group with aortic ring calcifications. Three patients showed both leaflet and ring calcification in the aortic region. These were in a younger age group and are included in the group of leaflet calcifications only. The average age of patients having ring calcifications is greater than that of those having leaflet calcifications. If the group with aortic ring and mitral ring calcifications is included in the group of isolated aortic ring calcifications, the average age difference becomes still greater. The average age of patients having mitral leaflet calcifications is considerably lower than the average age of those with calcifications in the mitral annulus. The incidence of hypertension is higher in those cases having mitral, or aortic and mitral, ring calcifications. The association of other visible calcifications in the arteries and in the bronchi is also higher in these groups. The lack of abnormal electrocardiographic findings in aortic calcifications of lesser degree, and in mitral ring calcifications, is consistent with the lack of effect on the heart function. That in the five cases of mitral ring calcification there was no murmur is also not an unexpected finding, since the valve leaflets are usually undistorted. The incidence of rheumatic fever history is considerably higher in both groups of leaflet calcifications.

The appearance of some of these calcium deposits is demonstrated by the following cases. The position of the rings is demonstrated in a heart specimen suspended in the usual oblique projections (Figure 1). The mitral ring or annulus is outlined by a soft wire inserted directly in the fibrous structure. The



A B

Figure 1.—Formalin fixed heart with soft wires in mitral and aortic rings and screen in muscular septum. (a) Right anterior oblique (30°±). (b) Left anterior oblique (60°±).

Figure 2.—Female. Age, 75. Enlarged heart. Clinical diagnosis of mitral stenosis. No history of rheumatic fever. No evidence of syphilis. The view is right anterior oblique. Diffuse calcium in mitral annulus and smaller sharp aortic ring of calcium.

Figure 3.—Male. Age, 62. Cardiac disease. Migratory joint swellings 15 years before. BP-170/95. Systolic and diastolic murmur at apex. EKG—auricular fibrillation. The view is left lateral with projection cephalad. Note aortic cusps distinctly outlined.

aortic ring is similarly outlined by a soft wire inserted in the wall of the aorta about one-half way between the commissures and the sinuses of the aortic cusps. The soft wire screen is placed directly in the muscular septum. The coronary arteries are already outlined by the calcareous plaques.

The aortic and mitral rings are demonstrated in vivo by very short exposure radiograms (Figure 2). The short exposure is possible when high current, high voltage and short distance between the anode and the patient are used. The contrast is increased by using a cone to limit the size of the radiographic beam. In the radiogram, the confusing shadows of rib cartilages and lung markings, easily distinguished fluoroscopically, are too well demonstrated.

Aortic ring calcifications may occur alone with heart disease. As in the mitral ring, the configuration is more regular and is smaller. The position is more anterior in the middle third of the heart shadow.

Some aortic leaflet calcifications are observed incidental to gastrointestinal examination. The cardiac silhouette may not be abnormal. A small fluorogram for permanent record is easily made at the time of the examination.

That the disease is of greater extent than the calcareous deposits becomes obvious when one considers those cases presenting mitral signs with calcium in the aortic leaflets only (Figure 3).

Reich's [10] prognostic evaluation in the presence of aortic valve calcification can be observed in Figure 4. In 18 months, there was marked failure ending with death. The aortic calcifications were particularly heavy and extensive. In such an instance, the difficulty of distinguishing the origin of the calcium in the aortic ring or cusps arises.

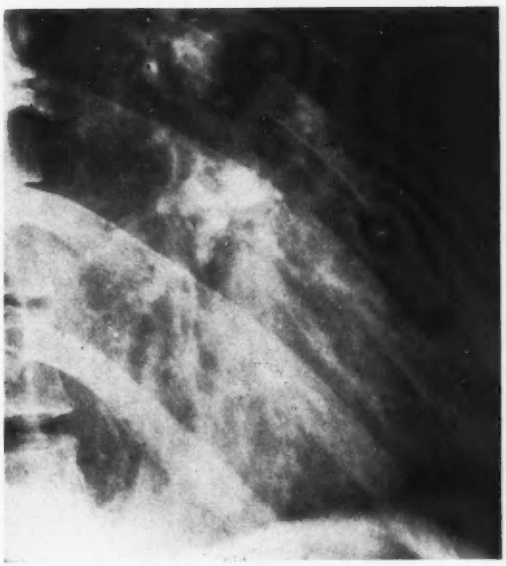


Figure 4.—Male. Age, 58. Right anterior oblique of heart. Heavy aortic calcium deposit. Autopsy confirmed aortic calcification and stenosis. Mitral valve edges slightly thickened. No histologic evidence of rheumatic heart disease.

Calcifications in the mitral annulus fibrosus are probably of less clinical importance than in the aortic ring.[4,14,15,19,24,27] Such calcifications usually begin

in the central portion of the annulus. The homogeneity and regularity, as well as the position and motion, are identifying characters. Mitral annulus deposits are not infrequently discovered in elderly individuals incidental to gastrointestinal examination. This may account for the observation of frequency of peptic ulcers in this type of lesion.[15] These calcium deposits are rarely visible in the usual chest roentgenogram and the extent of calcium deposition is poorly observed.

Mitral annulus deposits can be entirely unsuspected until the patient is examined under the fluoroscope. In one case (Figure 5), evidence of heart disease was present for only two months, but the calcification undoubtedly had been present for a much longer period. The effects of annulus calcification in the mitral region are usually due to extension of the calcium or of the disease processes into the conduction fibers of the heart.[14,15,27]

Small mitral leaflet calcifications are distinguishable by their snapping motion and by the more localized extent of the deposit. These deposits occur in younger individuals who frequently show associated enlargement of the left auricle (Figure 6). The history of rheumatic fever is more frequently elicited. The distinct triangular outline of the deformed valve can occasionally be observed.

SUMMARY

A brief discussion of calcareous deposits in aortic and mitral annulus and in the valve leaflets is presented. The appearance of some of these deposits is demonstrated. Many of these will not be seen unless searched for specifically. Fluoroscopic examination offers a means of more accurate observation and a much higher frequency of discovery of minimal or early deposits.

It seems clear that the deposits are due to more than one disease process. The annular type occurs in older people and is probably related to an atherosclerotic process. The leaflet type occurs in younger people and is probably related to rheumatic heart disease. Since fluoroscopy permits distinction between annular and leaflet calcification, one has an additional aid in distinguishing rheumatic from non-rheumatic heart disease.

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Figure 5.—Female. Age, 56. Heart enlarged in all directions. Heavy calcium in mitral annulus (also present in aorta and bronchi). BP—180/78. Systolic murmur over precordium and apical mid-diastolic murmur. EKG—2:1 atrio-ventricular block.

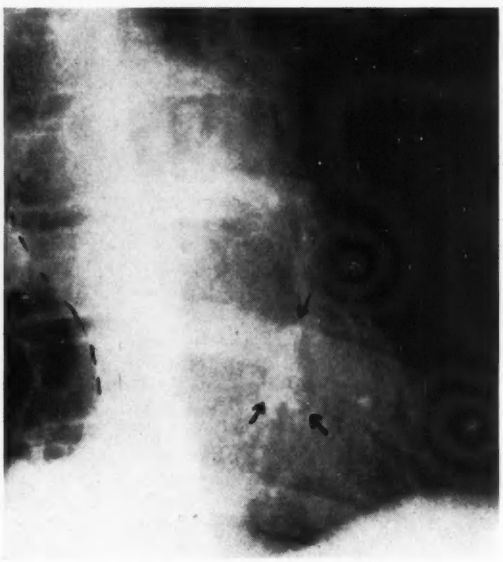

Figure 6.—Male. Age, 39. Congestive failure. Migratory polyarthritis at age 29. Right anterior oblique of heart. Triangular calcium deposit in posterior mitral leaflet. Prominence of left auricle higher than usual above diaphragm.

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Roentgen Cardiac Kymography: Electrocardiographic Correlation

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THE purpose of this paper is to re-evaluate the roentgen cardiac kymogram and to demonstrate that the kymogram sometimes gives information which is not obtainable by any other means.

INTRODUCTION

Single slit roentgen kymography was introduced by Sabat in 1911.[5] Crane,[1] in 1916, published the first American paper dealing with the use of the method. Since that time, one major improvement has been made, the perfection of the multiple slit kymograph by Stumpf in 1928.[9] Hirsch[4] published his first paper on the use of this instrument in this country in 1934. There has been considerable work on the application of this type of kymograph; but, in the past few years, little has been added to the literature by way of evaluation of this particular method of examination and it is felt that reconsideration at this time would be worth while, especially as we feel much as Schwedel[7] does: "Roentgenkymography has made definite contributions to cardiac roentgenology. It makes possible a permanent record of cardiac motion. It permits analysis of the pulsations of the heart and the great vessels as to amplitude and time. . . . Like all newer methods, roentgenkymography has gone through an initial period of exploitation and exaggerated claims, and, currently, it has largely fallen into disuse. But in the coming years this method will no doubt be more adequately evaluated on the basis of its actual usefulness in cardiac roentgenology."

The kymograph, which was used in this work, was of a conventional type, with 0.4 mm. slits in a lead plate, and a film excursion of 12 mm. The obvious usefulness of this multiple slit machine over the single slit is that it allowed a complete study of the whole organ simultaneously. The other advantage is that one area can be compared with another during the same interval. The single slit method (in some instances) gave a more detailed view of the movement, but it did not allow viewing the organ as a whole, nor did it allow for any cyclic timing of the various parts of an organ. This is especially necessary in cardiac roentgenkymography. The usefulness of the comparison of the waves of the various chambers simultaneously is, of course, obvious. The addition of a timing device for the duration of the exposure is also useful.

TECHNIC

Routinely, exposures of 1½ to 2 seconds were made in mid-inspiration with the patient as relaxed as possible in order to avoid a Valsalva or Müller effect. Films in forced inspiration and expiration were made on occasion to confirm or rule out certain minimal findings. Projections were made in the P.A. position, and in most instances, both oblique positions (RAO 45°; LAO 65°), using a 48 inch distance. The oblique views were desirable to provide projections in other planes and occasionally were necessary to eliminate misleading "pendulum motion" or "sagittal plane" contraction, both resulting in poor lateral excursion, and consequently low waves on the P.A. kymogram.[6]

CRITERIA FOR KYMOGRAPHIC DIAGNOSIS

The criteria for kymographic diagnosis are the depth (or height), shape, and phase of the waves.[9,10] The depth of the waves is considered relatively important. While the normal is quoted as ranging from 4 to 8 mm., often without specification of the target-film distance used, we found that in most of the cases in this series the waves were usually under 4 mm. in depth (See Figure 1). However, in the cases with myocardial disease of any type, the height (or depth) of the waves is often 2 mm. and frequently less than 1 mm. (All measurements made directly on the 48 inch distance film). Other findings sometimes suggestive of disease in the myocardium are "peaking" of the waves where the waves come to an abrupt point.

Splintering of the waves (both systolic and diastolic) was regarded as important in the diagnosis of disease, especially when it is accompanied by waves of low amplitude which appear fuzzy (unsharp), (See Figures 2, 5, and 6). Of course, the suppression of waves or absence of movement (so-called "silent frames") or the outright reversal of movement (so-called "paradoxical frames") in any area was considered diagnostic of myocardial damage, and when this occurred in the persence of suitable associated findings, an area of infarction was diagnosed. Localized adhesive pericarditis may produce suppressed and fuzzy waves and mimic an area of localized myocardial damage, but the condition was not encountered in this series.

The term, myocardial damage, is used in this report to include various cardiac abnormalities from myocarditis through myofibrosis to frank infarction. This term was used in this same broad sense in reference to interpretations of both the kymograms and electrocardiograms.

RESULTS

Because most of this study was done on Naval personnel, the average age of our cases (38 years) is somewhat less than one might expect in a general hospital. In the cases with a clinical diagnosis of

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The material referred to in this paper was seen at the U. S. Naval Hospital, Oakland, while the authors were on duty at that station in 1944-46. The opinions are those of the authors and in no way reflect the views of the Navy Department.

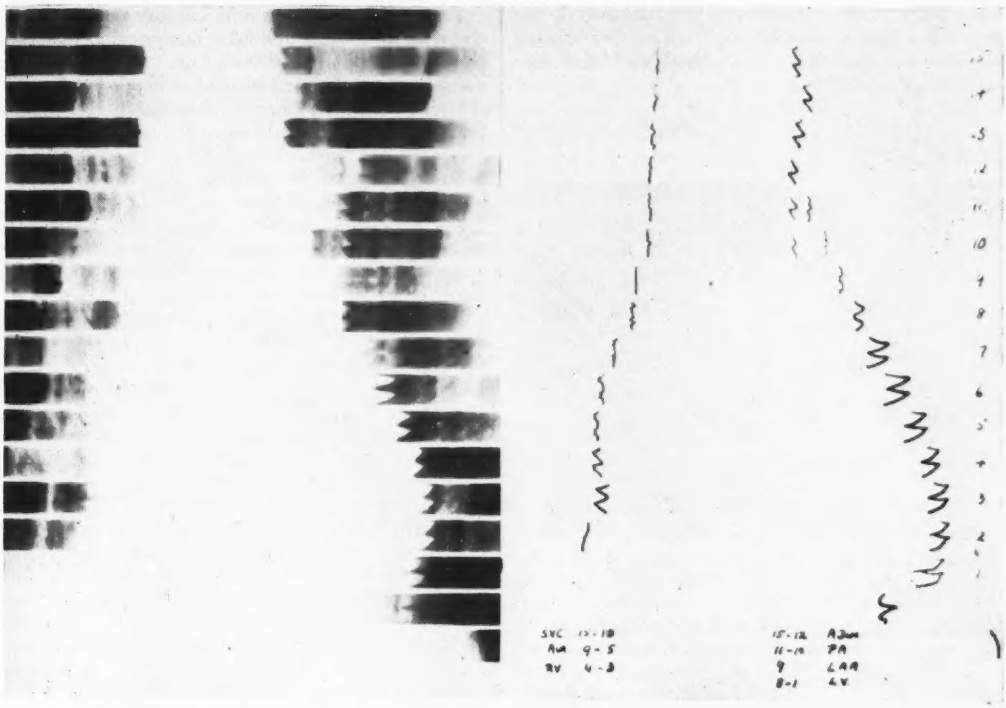

Figure 1.—Roentgen kymogram of a healthy adult, age 30, with tracing to illustrate the various types of waves normally present over the cardiovascular silhouette. The numbers refer to the individual "frames" above the left hemidiaphragm. P.A. view.

coronary artery disease, angina pectoris, or hypertension, the average age was 44.5 years.

Over 350 sets of kymograms were made. Of these, 275 cases are available for review. Two hundred and forty-nine of the patients had one or more electrocardiograms, so that a comparative test of the two methods of diagnosis of cardiac disease could be made.

To test the reliability of cardiac roentgenkymography on our miscellaneous group* we decided to use the electrocardiogram as an accepted test for the diagnosis of major cardiac disease and then match the kymogram against this method. In many instances, only single electrocardiograms (and kymograms) were made, but in other instances, serial tracings and x-ray studies were made. The electrocardiograph used was usually a "Cambridge Simpli-Trol" and occasionally a "Sanborn Cardiette." The leads were the standard limb leads and the IVF (the exploring electrode over the cardiac apex, and the indifferent lead on the left ankle). Most of the interpretations were made by Maurice Sokolow (then Lt. Comdr. MC, USNR). All interpretations of electrocardiograms were accepted as written in the clinical record and no "special emphasis" on reinterpretation was attempted, in order to insure an evaluation of the observed results of day-to-day clinical tests. The two methods correlated in 80.5 per cent of the cases, or 201 patients (See Table 1). There was a failure of correlation in 19.5 per cent, or 48 patients.

To test the methods against one another, figures were subjected to statistical analysis (Chi square

* The group comprised patients with various suspected or known cardiac disorders, and ranged from functional disturbances following tsutsugamuchi disease to frank coronary occlusion.

TABLE 1.—*Correlation of Kymograms and Electrocardiograms in the Diagnosis of Myocardial Disease*
(249 cases)

	Cases	Per Cent
Kymo and ECG positive	28	11.3
Kymo and ECG negative	146	58.4
Kymo and ECG questionable	27	10.8
Total correlated	201	80.5
Kymo negative, ECG positive	8	3.3
Kymo positive, ECG negative	12	4.8
Kymo positive, ECG questionable	3	1.3
Kymo questionable, ECG positive	5	2.0
Kymo questionable, ECG negative	8	3.3
Kymo negative, ECG questionable	12	4.8
Total failure of correlation	48	19.5

Note: The Kymograms were made within three to five days of the electrocardiograms in the vast majority of instances.

The term myocardial disease includes miscellaneous cardiac disorders ranging from myocarditis to frank infarction.

test), and it was observed that the chances of the particular figures observed occurring by chance would be less than one in a hundred, which is statistically significant.†

†We are grateful to Dr. Frank Weymouth, Professor of Physiology, Stanford University, for his aid in interpretation of the statistics.

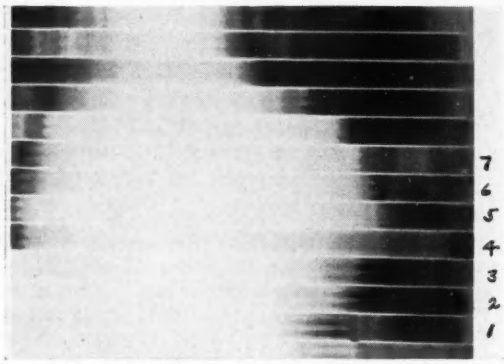

Figure 2.—P.A. kymogram of male, age 54. Note the absence of normal waves in frame number 4 above the left hemidiaphragm ("silent" frame); and the reversed pattern in frames 5 to 7 ("paradoxical" motion). Roentgen diagnosis: myocardial damage, presumably infarction, involving the wall of the left ventricle. The patient was a physician with a clinical diagnosis of infarct. Autopsy verification 2½ weeks later.

Further analysis of the 48 instances of "failure of correlation" reveals that failures were made in a positive (Kymo) and negative (ECG) fashion and vice versa 20 times. It is not unreasonable to assume these represent inherent errors in both methods of examination. If so, this would leave 28 cases wherein there was need for further explanation. However, in this group of 28 cases, it is evident from Table 1 that all had questionable elements in the interpretation of the electrocardiographic tracing or the kymographic film; therefore, the actual aid that either one of these tests *might* be to the other is more considerable than the figures suggest. In other words, where one of these tests was positive, and the other questionable, one acted to confirm the other. On the other hand, when one was negative, and the other questionable, it is more likely that the negative result was correct. If we assume this, we resolve 28 of the cases in which there was some questionable failure of correlation of the two methods. The other 20 cases need further and more detailed individual case-by-case review. But, even if there were adequate explanation for none of these, it is evident that the overall figures result in an error of less than 10 per cent, which in clinical work must be regarded as proof of a quite reliable method of examination.

Roentgen cardiac kymography is not intended to replace other clinical methods or to supplant roent-

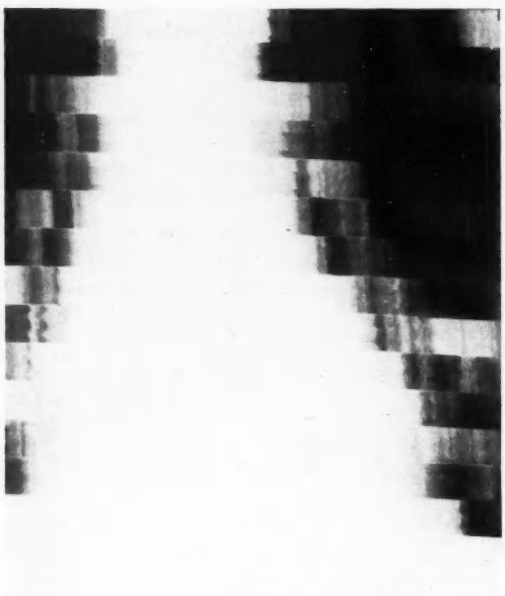

Figure 5.—P.A. kymogram of male, age 36. Note the very poor amplitude of the waves over the entire left side of the heart and over the lower half of the right. *These findings were also present in both the L.A.O. and R.A.O. projections.* Roentgen diagnosis: myocardial disease, severe probably infarction. Clinically, the patient had substernal pain and dyspnea, but his *ECG was repeatedly negative* before and after the kymograms were made. He was allowed to go on leave. After sprinting to catch a train his attacks recurred. The ECG findings then showed changes suggestive of coronary disease. Clinical diagnosis: Coronary occlusion.

Figure 6.—P.A. kymogram of male, age 48. Note the shallow or paradoxical pulsation over most of the left ventricular border. ECG made the day before entry was negative. Clinical story questionable. Patient was released from hospital for ambulatory convalescence at home five weeks later and kymogram still showed evidence of a marked amount of myocardial damage. He developed acute substernal pain within 24 hours of departure from the hospital. Autopsy next day disclosed acute and recent infarction.

genoscopy or roentgenography. Properly interpreted, roentgen kymograms have been demonstrated here as a reliable source of additional information, and in a small percentage of cases can provide information not obtainable clinically or even by ECG.[2,3,8,11]

SUMMARY

A review of 249 cases in which both roentgen cardiac kymograms and electrocardiograms had been made confirms that the roentgen kymograph is a useful method of examination of the heart in clinically suspected cases and may give information which is not obtainable by any other method. Two hundred and one cases (80.5 per cent) correlated with the electrocardiogram. Forty-eight cases (19.5 per cent) did not correlate with the electrical tracing. Illustrative cases are used to bring out the various points of interest:

1. A case with autopsy proof exemplifying a typical myocardial infarct.

2. A case with autopsy proof of myocardial infarct in which the electrocardiogram was negative and the kymogram positive.

3. A case of a stab wound of the heart (Figures 3 and 4) in which the initial electrocardiogram showed evidence only of pericarditis while the kymogram was positive for localized myocardial damage. Subsequently, the electrocardiogram became positive, and ultimately, both sets of tests disclosed return to normal patterns.

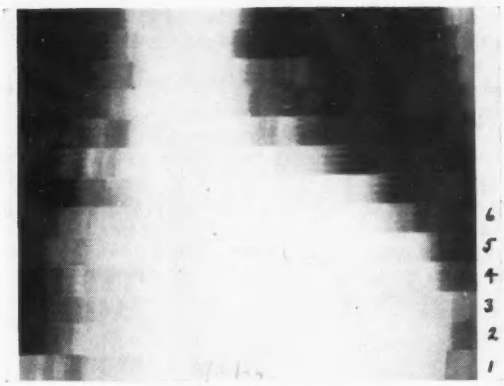

Figure 3.—P.A. kymogram of a male, age 31. Note the "silent" frames, numbers 1, 2, and 3 above the left hemidiaphragm, indicating apparent absence of lateral motion in this area; very shallow amplitude of pulsation in frames 4 to 6 ("damped" motion). *These findings were also present in the L.A.O. projection.* Roentgen diagnosis: localized myocardial damage. Clinically, the patient had a stab wound in the heart. The ECG interpretation was "acute pericarditis."

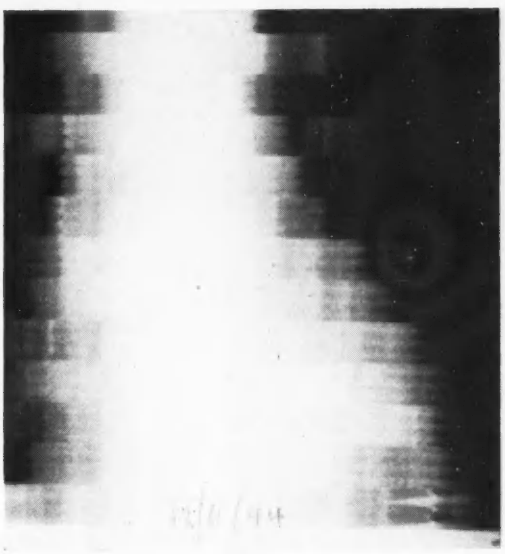

Figure 4.—Same case four months later. Note return of normal motion over the lower half of the cardiovascular silhouette on the left. Clinically well. ECG also returned to within normal limits.

CONCLUSIONS

1. The roentgen cardiac kymogram provides a permanent record of cardiac pulsations.

2. Correlation of the roentgen kymogram with the electrocardiogram is good.

3. In cases of suspected myocardial disease in which the electrocardiogram is negative, the roentgen kymogram may provide invaluable diagnostic information, especially in cases of myocardial infarction.

4. The roentgen kymogram may serve to corroborate the correct clinical diagnosis when the electrocardiogram is inconclusive.

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Major Trigeminal Neuralgia

An Analysis of Two Hundred and Forty-five Cases

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MAJOR trigeminal neuralgia has been a well recognized clinical entity since Fothergill's classical description in 1776.[3] Early in the Nineteenth Century Bell,[1] in England, and Magendie,[10] in France, showed that the fifth cranial nerve rather than the seventh supplied sensation to the face. After this time the treatment of the disease improved rapidly, and it has been more or less standardized since Spiller and Frazier[13] described the procedure used by most neurological surgeons at present. Interestingly, this is one of the few diseases the treatment of which has been known for many years, but the etiology of which remains obscure in spite of considerable investigative work.

A series of 245 cases in our hospital has been reviewed. The disease was found to occur predominantly in the older age groups, the highest incidence being in the decade from 50 to 60 years of age (Figure 1). There were 159 females and 86 males, a ratio of nearly two to one (Figure 2). The right side was involved in 179 cases while the left was involved in only 75; in nine cases (3.6 per cent) there was bilateral involvement (Figure 3). The average duration of symptoms before the patients were seen at this clinic was 7.1 years for females and 7.2 years for males. The longest duration of symptoms was recorded in the case of a woman who had had intermittent episodes of severe pain for 35 years. The onset of pain was approximately equally divided between the second and third divisions of the nerve, onset in the first division being quite rare. The pain often spread to involve adjacent divisions. The second division was involved in 201 cases, the third in 180 instances, and the first in 66 cases (Figure 4). These figures denote only the total number of times pain occurred in the divisions and do not indicate in which division the pain originated.

The description of the pain was strikingly similar in each case. There was a sudden onset of jabbing, cutting, burning, lightning-like or electric-shock-like pain which radiated over one or more divisions of the trigeminal nerve. The radiation was to the peripheral distribution and never crossed the midline. Each individual shock was of short duration, but there might be many shocks in rapid succession. The pain stopped as suddenly as it began. In describing the pain the patients used the same general terms, in which there was a preponderance of adjectives connoting the thermal quality, the cutting sensation, and the suddenness of onset and cessation. As Frazier and Russell[5] have pointed out, the most commonly used adjectives were shooting, sharp, paroxysmal, burning, lightning-like, stabbing, lancinating, and tearing.

Although the first indication of the disease was usually a sudden, typical lancinating pain, there were several patients who noted a peculiar prickling, burning, throbbing sensation for days or weeks prior to the first sharp pain. In one instance a woman had this prickling, throbbing sensation in the upper lip and jaw for five years before the actual onset of paroxysmal pain.

Characteristically there were intervals of complete freedom from pain between the paroxysms, and complete remissions of pain for months or years. With

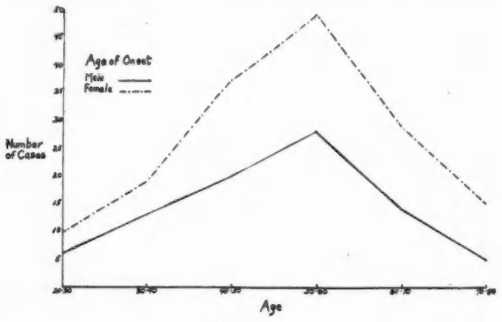

Figure 1

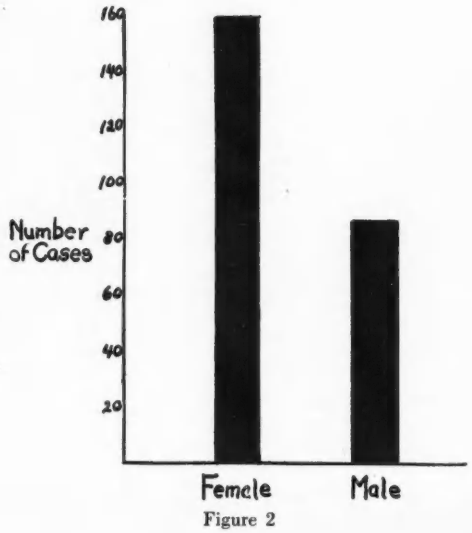

Figure 2

Read before the section on Neuropsychiatry at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

From the Division of Surgery, University of California Medical School, San Francisco.

each remission the patient hoped he would have no more pain, but lived in constant fear of a recurrence.

Usually, but not always, there were definite trigger areas, or small areas which if stimulated would precipitate an attack. These were most commonly on the lips, particularly at the angle of the mouth, the gums, the nasolabial fold, the ala of the nose, and the chin close to the mental foramen. During a severe attack stimulation over any area of the face on the side affected might set off a paroxysm. The trigger area was not always supplied by the same nerve distribution as the affected division. In one instance stimulation of the nasolabial fold precipitated pain in the first division.

The patients were able to describe accurately certain movements or actions which would cause pain. These were most commonly laughing, talking, eating, drinking cold or (sometimes) hot liquids, brushing the teeth, washing the face, or shaving. Many patients would protect their faces on going outdoors, for cold air or wind might give pain. They also learned to shield themselves from these stimuli and to keep the involved side of the face immobile, talking out of the opposite corner of the mouth. They resented examination or any attempt of the examiner to touch the face.

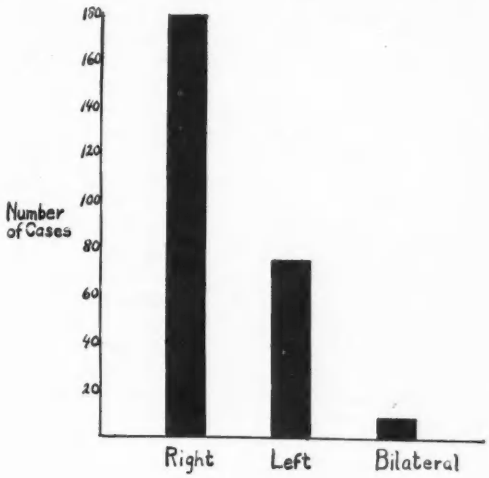

Figure 3

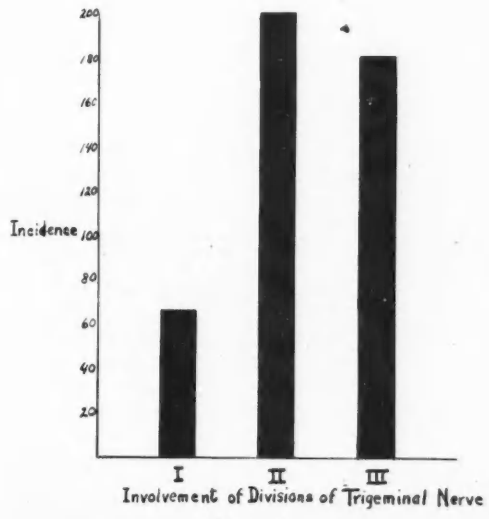

Figure 4

The radiation of the pain varied not only with the division or divisions involved but also in individuals. Often the pain seemed to strike anterior to the ear with explosive violence and then radiate into the peripheral distribution along the upper or lower jaw, into the lips, beneath or above the eye. Radiation into the tongue was not uncommon. In other patients the pain might have its origin in the jaw or gums and radiate upward toward the ear or temple. Many of these people firmly believed that the teeth were the cause of the pain and insisted on extractions. In this series 69 patients (28.1 per cent) had had extractions, usually multiple, in the hope of relieving their pain.

Although the characteristic pain in trigeminal neuralgia is sudden in onset, with cessation and complete freedom from pain between attacks, 44 patients (17.4 per cent) noted residual soreness following an attack, or pain between attacks. Of these, 24 had only residual soreness, aching, or burning sensation, which lasted from minutes to hours after the typical paroxysmal attack of pain. In this group sensory root sections were done in 21 and alcohol injections alone in three cases. All obtained relief. There were postoperative paresthesias in two cases. The remaining 20 of the 44 patients had continuous aching pain between attacks with the paroxysmal lancinating pain superimposed. Sensory root sections were done in 15 cases and alcohol injections alone in five cases. All except one patient obtained complete relief. In this case several alcohol injections were attempted but all were unsuccessful, giving no anesthesia and no relief from pain. A sensory root section was done and this relieved the lancinating pain entirely but did not affect the dull, constant aching pain. There were two cases of mild postoperative paresthesias in this group also.

In 15 cases (6.1 per cent) there were definite manifestations of sympathetic involvement during the attack of pain. In these cases there was flushing of the face, lacrimation, injection of the conjunctiva, or increased salivation. In one case there was marked blanching of the skin over the area of pain in the distribution of the second and third divisions of the trigeminal nerve. All these patients obtained relief from either sensory root section or alcohol injection. There were two cases with mild postoperative paresthesias.

In most instances there was no evidence of predisposing factors. The pain struck suddenly for no apparent reason. However, in 25 cases (10.2 per cent) the patients related the onset of their pain to some definite circumstance. In 19 of these the pain followed a tooth extraction or

other dental work. None of these patients had consulted a dentist because of pain. Typical paroxysmal pain followed the dental work within a period of three hours to two weeks, and the pain centered in the area in which the dental work had been done. In four cases the pain followed sinus infections. In one case the pain followed a blow to the jaw and laceration of the lip, and in another the pain started during a course of x-ray therapy for a basal cell carcinoma of the nose. In these last six cases the typical paroxysmal pain centered in the region which had been previously involved by infection or trauma. All were completely relieved by sensory root section or alcohol injection.

Treatment in this series was primarily surgical. Alcohol injections were done in 175 cases. Many of these patients had multiple injections. The longest period of relief from an alcohol injection was seven years. The average duration of relief was from six to fourteen months. Neurectomies were done in 50 patients. These were mainly supra-orbital, infra-orbital, and inferior alveolar neurectomies, and the period of relief averaged approximately the same as with alcohol injection. Sensory root sections were done in 179 patients. In most of these either alcohol injection or neurectomy had been performed previously. There were three deaths following root section by the subtemporal approach, an operative mortality of 1.6 per cent. Postoperative paresthesias occurred in 27 cases (15 per cent). These consisted of itching, crawling or burning sensations over the anesthetic areas. Some had shooting pains somewhat similar to the original neuralgia but of less severity. The majority of these paresthesias were mild, but in a few instances they were troublesome and persistent. In 32 cases (17.8 per cent) a temporary facial palsy appeared postoperatively, which, however, cleared completely in all instances. The incidence of keratitis in those cases with anesthesia over the first division was low, and available records show only five cases (2.9 per cent). None were severe. Where partial root section was performed pain later appeared in six cases in the undivided portion and required reoperation. In one case of major trigeminal neuralgia involving only the second and third divisions, a differential section was performed, sparing the first division. Seven years later typical pain appeared in the first division and was relieved by complete section of the sensory root. One case with typical shooting pain, but with overflow of the pain into the neck, had no relief from root section. This patient probably had an atypical neuralgia the nature of which might have been shown by alcohol injection preoperatively. Grant [8] had in his series seven similar cases in which he believed alcohol injection would have established the diagnosis and prevented an unsatisfactory operative result.

Trichlorethylene was used in 48 patients in which there was adequate recording of the results. Of these, 25 received some benefit, while 23 could see no change in the character or severity of the pain. In those patients who obtained relief, the usual comment was that it "took the edge off the pain." In some it seemed to hasten a remission, while in a few there was immediate relief. It was noted, however, that often the inhalations would give relief for three to four months and then have no further beneficial effect.

DIAGNOSIS

In the typical case of major trigeminal neuralgia the diagnosis may be made from the history alone. It is confirmed by the absence of neurological changes on examination. As Frazier [4] has pointed out, a diagnosis of trigeminal neuralgia is not justified when there is an associated area of anesthesia or hyperesthesia in the trigeminal zone, when the pain is continuous and not paroxysmal, when there are not periods of complete freedom from pain in the early stages, or when the location of the pain does not correspond to the anatomic zones.

Cushing [2] listed five types of facial neuralgia which might be mistaken for major trigeminal neuralgia. He included sphenopalatine, postherpetic, and geniculate neuralgias, as well as convulsive tic and neuralgias due to tumors. In postherpetic neuralgia there is frequently a sharp shooting pain identical with that in trigeminal neuralgia, but usually there is also a constant burning sensation over the area involved. The history of herpetic lesions and the presence of scarring suggest the diagnosis. The pain in geniculate neuralgia may be differentiated by its location in the ear. Tumors in the cerebello-pontine angle and in or adjacent to the gasserian ganglion may likewise give identical pain (i.e., symptomatic tic) in the early stages. The presence of anesthesia is diagnostic. Sluder [12] has noted that the pain of sphenopalatine neuralgia may occur with stabbing sharpness as in a tic, but with spread of pain over the occiput, neck, and shoulder, and often into the arm. In convulsive tic the paroxysmal pain is associated with the muscular spasm and does not precede it as is the case in a true tic where grimacing may follow the onset of pain.

Many other conditions and their differentiation should be considered. Glossopharyngeal neuralgia causes shooting pain identical with that of trigeminal neuralgia but with its distribution in the pharynx and base of the tongue. Diseases affecting the central nervous system, such as multiple sclerosis, syringomyelia or syringobulbia, and tabes dorsalis, may produce similar pain,[15] but in our experience such cases are extremely rare. Aneurysms involving the sensory root or, more commonly, the first division of the trigeminal nerve usually give rise to a more constant pain associated with sensory or motor changes. Head and facial pain due to vascular disturbances such as the histamine type headache and migraine are distinguishable by the onset and duration of pain. Sinus infections, dental abnormalities and refractive errors ordinarily do not give rise to paroxysmal pain.

In addition, there is a fairly large group of patients whose facial pain is transitional between major trigeminal neuralgia and migraine.[7] It was recognized early that some patients did not get relief from

operative attack on the trigeminal tract in spite of the resulting anesthesia. Frazier and Russell [5] noted certain peculiarities in the type of pain in this group of patients and in 1923 classified such cases as atypical neuralgias. Glaser [6] described the complete syndrome in 1928. The pain is a peculiar, deep-seated ache not referred to the periphery, and is constant and not paroxysmal or intermittent. The syndrome is characterized by attacks of greater or lesser severity at varying intervals. Remissions are rare. It is far more common in females than in males and predominates in the younger age groups. In 50 per cent of the cases there are sympathetic phenomena. The pain does not confine itself to the distribution of any of the cranial nerves, but may involve the scalp as well as the neck and shoulder. In spite of this fairly constant and typical picture, there are instances where the atypical neuralgia may so closely simulate major trigeminal neuralgia that differentiation can be made only by the use of alcohol injections to block the divisions involved. The necessity for accurate diagnosis must be stressed, for it has been thoroughly proved that in atypical neuralgia, as in postherpetic neuralgia, section of the trigeminal nerve not only fails to relieve the pain, but frequently makes the complaints worse.

COMMENTS

Of interest in this series is the group of 44 patients who had residual soreness following paroxysms of pain and continuous pain between paroxysms. Although each had the typical lancinating pain of trigeminal neuralgia, each also had the deep aching pain characteristic of the atypical neuralgias. Since all except one of these patients were completely relieved by alcohol injection or root section, one must conclude that 43 of them had true trigeminal neuralgia.

Similarly, the 15 patients that showed sympathetic phenomena during the paroxysm of pain were all relieved by alcohol injection or root section. Glaser [7] states that sympathetic manifestations occur in 50 per cent of the atypical neuralgias, but are not found in true trigeminal neuralgia. This has not been our experience. In our group the pain was relieved and one must conclude that it was due to major trigeminal neuralgia. Postoperative paresthesias were not more common in these groups than in others with the typical tic.

These two groups serve to emphasize the fact that the clinical picture of trigeminal neuralgia is not always clear-cut and may have features suggestive of atypical neuralgia. It is of particular importance in these cases to make an accurate diagnosis by the use of alcohol injection before performing root sections. If pain is relieved at once when the area is made anesthetic we can be certain of the diagnosis and that section of the root will give lasting relief.

Harris,[9] in his survey of 1,433 cases, states that peripheral sepsis, from such origins as dental caries, pyorrhea, antral abscess and sinusitis, is the prime cause of the disease. No definite relationship of the incidence of trigeminal neuralgia to infection has been shown in other large series,[11] nor has there been any definite relationship to infection in this series. However, the onset of typical trigeminal neuralgia in 19 cases immediately following tooth extraction or dental work seems too frequent an occurrence to be mere coincidence. It would appear that some change had occurred at the peripheral nerve endings which played a part in causing the disease.

The use of trichlorethylene in the treatment of trigeminal neuralgia seemed to be of value in this series, although others [14] have felt the drug was useless in all instances. It proved worthwhile in treating several patients 80 years of age and over, when their condition was such that the operative risk was considered too great and alcohol injections had been unsuccessful. In a few cases the relief was immediate and complete. Whether this was due to regular remissions or not cannot be determined.

Alcohol injections serve two main purposes. If the pain is completely relieved by injection, the diagnosis is established and sensory root section can be carried out with confidence that the pain will be permanently relieved. The anesthesia produced by the injection also serves to accustom the patient to the permanent anesthesia produced by root section. Some patients who were poor operative risks have been kept in comfort by repeated alcohol injections over a period of years.

It is felt that the procedure of choice is a differential section of the sensory root wherever possible with sparing of the motor root. The operative mortality of 1.6 per cent is not unreasonable when one considers that the majority of operations are done on patients between 60 and 75 years of age who often are in a poor state of nutrition because of their inability to eat during their attacks of pain.

DISCUSSION BY NATHAN CROSBY NORCROSS, M.D., OAKLAND

The problem of trigeminal neuralgia has always been a fascinating one to me, more so, perhaps, since the first operation I performed was No. 1002 in Charles Frazier's old operating room. I feel that today we are well equipped to deal rationally and successfully with this disorder. I think the authors of the paper have covered the field thoroughly and with great insight. There are a few comments that I would like to add. The pain of true, major, trigeminal neuralgia is characterized by three things. It is *paroxysmal*; it is *peripheral*; and it is *parallel*—that is, parallel to the anatomical course of the branches of the trigeminal nerve. If these three features are kept in mind, one is unlikely to make a mistake in the diagnosis. As the authors have noted, however, there is an occasional patient apparently having true tic who does not obtain relief from section of the sensory root of the nerve. Even though this percentage is small and has been small in other series of cases, I feel that it is enough to make us want to carry out an alcohol injection before operation is recommended. The alcohol injection is a temporary procedure. The patient will recover from its effects. On the other hand, the operation is permanent and no restoration of function will take place in the nerve involved.

There are several other factors in the use of alcohol injection which I, with the authors, feel make it warranted in practically all cases of this sort. First is the old, debilitated

patient who comes in suffering from severe malnutrition. This is brought on by the intense pain provoked by any attempt to eat or drink. This patient is in no condition for operation and should be given temporary relief by the simplest method possible in order that he can be built up and got into condition for later operation. Second: Occasionally the differential diagnosis between true tic and atypical facial neuralgia or a combination of neuralgias is extremely difficult and, in these cases, alcohol injection is the diagnostic agent of choice. Third is the patient who will have severe paresthesias following root section. These patients cannot be segregated from the others until an alcohol injection or the operation has been performed. To be sure, they constitute a small percentage, perhaps between 3 and 5 per cent. They state that the paresthesias are almost or fully as severe as the pain they had prior to operation. I feel that the classical, subtemporal approach of Frazier is probably not the most desirable procedure in this small group, but that we should consider trigeminal tractotomy which leaves sensation in the face almost normal. So far as we know at present, this procedure offers a better chance of avoiding severe, incapacitating, postoperative paresthesia.

Trichlorethylene has been found to be a helpful adjunct in the early treatment of this condition in some patients and I, empirically, add to that large doses of B-1. With trichlorethylene I have been able to bring about what appears to be spontaneous remissions from tic for fairly long periods of time. This brings up a point that I feel about quite strongly. In the more elderly group of patients I do not feel we are warranted in rushing ahead to recommend major surgery. To be sure, the mortality rate of this procedure is only between 1 and 2 per cent and this has been essentially true for all of the various reports of large groups that have appeared in the literature. One must remember, however, that in many of these elderly patients some of the less radical methods will relieve the pain for the duration of their lives, without their having to be subjected to a major surgical procedure.

In regard to the possible etiology of tic about which, as the authors have said, nothing conclusive is known, one hint has been brought out by Lewy and Grant, from their pneumoencephalographic and histological studies of patients with major trigeminal neuralgia. Histologically, in six cases it was demonstrated that there were degenerative changes of the thalamic nuclei and of the corona radiata, bringing about some degree of interruption of the thalamocortical fibers. The surprising thing about their findings was that in five cases out of six these lesions were found only on the same side as the tic had been. Encephalograms had also been performed at the University of Pennsylvania during that time and several of these demonstrated atrophic changes deep in the ipsilateral hemisphere, apparently caused by wasting of the thalamus. Also, attention was called to the fact that of one group of 50 cases investigated thoroughly, 30 showed definite evidence of arteriosclerosis and renal dysfunction.

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Relationship of the Health Officer and the Practicing Physician to the Planning of Smaller Hospital and Health Center Facilities in California

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THE Bureau of Hospital Surveys of the State Department of Public Health has but recently completed a state-wide study of existing hospital and health center facilities in California. Similar surveys have been or are being made in the majority of the states and information secured is being correlated by a special staff at the headquarters of the American Hospital Association in Chicago. When completed this voluminous material will form the basis for determining the existing health facilities of the nation.

As a result of the study in California a plan will be drawn up and recommendations will be made as to what type of facility is needed and where it should be located to make hospital care available to all areas. This planning will take cognizance of existing institutions which are rendering adequate service.

California has been tentatively divided into 18 regions conforming broadly with established trade areas but not political boundaries since county and regional lines do not necessarily coincide. Each area or region is planned to contain a centrally located regional hospital surrounded by an adequate number of community general hospitals which in turn are encompassed by smaller community health centers. The community general hospital and the health center will of necessity offer more limited types of service and rely on the central regional institution to augment their facilities and special services just as the latter will in turn rely on the teaching hospital connected with a medical school for certain highly specialized procedures.

The problem of supplying an adequate type of service becomes increasingly difficult as the distance from the centers of population concentration increases. It is a problem of personnel as well as one of adequate facilities.

If one stops to consider the situation it becomes evident why newly graduated doctors of medicine prefer the larger centers. We train these men under ideal conditions of equipment and leadership in the various special branches of medical science. The student and intern is thrown with men who stress the most modern methods of diagnosis and therapy in an atmosphere of practice at its best. Can we blame these same young men if they desire to continue in as close association with this particular set of conditions as is possible? Is it to be expected any of them will elect to isolate themselves in communities where it is impossible to practice as they have been taught, impossible to apply the methods they have been told are necessary?

How may the desired standards of service be attained and, just as important, maintained? The mere construction of hospitals and health centers in the absence of medical and technical personnel would accomplish nothing. Likewise, personnel will not willingly choose to settle in areas lacking adequate facilities. The remedy is not to be readily found. It is generally agreed among those who are interested in this situation that economic conditions, while responsible to some extent, are not the only factors influencing this availability.

One important step toward the goal of adequate care in the areas where the density of the population does not justify the erection of any facility but one rendering limited service would be the establishment of a combined medical service center and public health center operated to supply not only hospital facilities and diagnostic and curative medical care, but public health services for the prevention of illness.

To bring about desired health facilities properly staffed to function efficiently there must be developed a close cooperation and association between at least three groups—the public, the medical profession and the public health department.

The people of a community will enjoy the type of public health and medical care it desires and demands. If the public is not in a position to judge what constitutes proper standards for their particular community, it is the duty of both the practicing physician and those representing the health department to see that the public is instructed and brought up to date in regard to such standards.

To carry out such an educational campaign effectively, there should be the closest working relationship between the medical men engaged in private practice and those concerned with preventive methods. It is only by this cooperation and mutual help that the desired result will be attained and facilities developed that will attract personnel and adequately serve the community.

Ideally such a plan requires the appointment of a full-time, specially trained, experienced medical officer of health and an adequate staff. This set-up should receive encouragement and cooperation from state medical, dental and nursing organizations, as well as from official and voluntary health agencies.

Read before the section on Public Health at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

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There should be an increasing understanding between practicing physicians and their colleagues in related fields concerning the role of local government in making available the resources which the services of preventive medicine are constantly expanding, as well as the place these resources occupy in relation to the practice of diagnostic and curative medicine in a community. The line of demarcation between the two is becoming less sharply drawn as new methods and techniques are developed and new fields invaded.

The detailed planning of hospital facilities—the number, type, and distribution—depends upon a thorough consideration of several factors. A general over-all estimate may be made on the basis of certain broad principles of hospitalization generally accepted and in common usage. The United States Public Health Service has promulgated the following bed standards:

General	4.5 per 1000 population
Tuberculosis	2.5 times average annual deaths from tuberculosis
Mental Disease	.5 per 1000 population
Chronic Disease	.2 per 1000 population

In estimating the hospital needs in California, the following tabulation is based upon the application of these standards to estimated population for 1946. The figures indicate the estimated number of beds necessary in each category, the number available on the basis of the current survey, and the estimated shortage in each class.

	Estimated Needed	Available	Estimated Shortage
General	41,625	27,525	14,100
Tuberculosis	9,920*	6,885	3,035
Mental	46,250	27,450	18,800
Chronic	18,500	5,200	13,300
Total	116,295	67,060	49,235

* Based on average annual number of deaths, 1940-1944.

These estimates are subject to many conditional factors which must be studied in detail before they may be unqualifiedly accepted. They do not take into consideration the number of general beds that need replacement.

The planning of new hospital and health center facilities for smaller communities becomes more complex as their functions and the place they should occupy in the community broaden. Construction and maintenance of such institutions is expensive, and it is by combining forces and creating a center from which emanate all health activities of the community that an improved standard of care may be more readily supported.

Through the close association mentioned above between an enlightened public, the private practitioner and the public health official, the desired goal will be brought nearer. It is, therefore, the duty of the medical profession and the health officers to work in close association in such manner as to make possible a high quality of health care in the smaller communities throughout the state.

DISCUSSION BY EDWARD LEE RUSSELL, M.D., SANTA ANA

Dr. Gilman's paper is a concise statement of the main objective of every medical statesman in America. It is mainly, to provide medical care which can be delivered promptly, adequately and of uniformly high quality, to all the people, everywhere. It is obvious, from Dr. Gilman's paper, that this objective cannot be easily achieved. As Dr. Gilman has indicated, the solution of this problem involves providing, first, the adequate physical facilities—regional hospitals, community general hospitals and health centers. This job, alone, is a tremendous undertaking which involves not merely an increase in beds, but the elaboration of a complex plan which makes proper allowance for all variants such as the age composition of the population, population distribution; the changes in medical practice due to new medical discoveries, and the changing hospital use habits of the general public.

As Dr. Gilman states, we must not only develop the physical properties, but must prepare to staff them adequately with competent physicians, nurses, technicians and service personnel. This, in itself, is a herculean task. We are just beginning to feel the full impact of the physician and nurse shortage. The recent war consumed years of educational time which, now, in most cases will not be retrieved. The finest and most modern hospitals, laboratories, x-ray equipment, physical therapy departments and diet kitchens without staff are valueless.

However, this great hospital system, which Dr. Gilman envisages, is neither visionary nor impractical. These are the basic essentials of adequate medical care for the American people. This plan, likewise, will change the pattern of medical practice for the future. Medical practice of the future will focalize around, and radiate from, the hospital and health center. We will see more of group practice and less of individual private practice, as we now know it.

Private practitioners and public health men will, of necessity, have a closer working relationship. This will be mutually beneficial and will more completely achieve their joint objective to maintain and improve the public health.

A Tularean Looks at Tularemia

RAY W. ROSSON, M.D., *Tulare*

TULAREMIA is a topic of interest to the physician in general practice and to various specialists, including internists, surgeons, dermatologists, pediatricians, and even at times gynecologists.[1,2,3,5,9] It is by name an appropriate subject for consideration in Tulare County, California, from which it derives that name.

In 1911 here in Tulare County, McCoy and Chapin isolated the *bacterium tularense* in ground squirrels which were dead or dying due to a disease affecting them at that time.[3] The author has been told by old-timers of this city that their field work was carried out in the area about 12 or 14 miles south of the town of Tulare. A guess is that McCoy and Chapin were most fortunate in locating a transitory localized epizootic. As a boy here, and sometimes in or near the very spots where they worked, I personally and with bare hands skinned or cut open numerous squirrels and rabbits, and knew dozens of other boys who did. Wearing gloves to do these things would have been ridiculous to us in those days, but I never heard of infection or sickness resulting.

In the many years that I have practiced medicine here I have been interested in tularemia. I have always hoped to find a case and have had agglutination tests made in search of it innumerable times. But I had seen no tularemia in Tulare County until in June, 1946, I found a bona fide case of it which was contracted within this county. The disease must be rare in this place of its scientific birth.

Aside from the case I reported, I have been informed through the Tulare County Health Department that it has no record of any tularemia being reported in Tulare County from December 31, 1940, when reliable records on it were started, to the time of writing this, except one in 1944 reported by an osteopath. Of this last-mentioned case there is no record with the County Department (or with the State of California Department of Public Health) concerning the methods used to diagnose nor any follow-up report of the case. In the circumstances, I am inclined to withhold judgment as to its authenticity. Of course, the number of wild rabbits and squirrels in this vicinity has greatly decreased since 1911, but on the other hand the human population has greatly increased.

The California State Department of Public Health has kept records on tularemia since 1927, and on June 2, 1928, the disease was made officially reportable in this state. In the period 1927 to 1946 inclusive, there have been only 322 cases reported to the State Department from all the counties of the vast area of California. Of these, 75 were not chargeable to any one locality and included were patients already ill or in whom the disease had been diagnosed before they entered this state, or who were itinerants. Although in Fresno County, which adjoins Tulare County on the north, just six cases have been reported in this period 1927 to 1946 inclusive, in Kern County, bordering us on the south, 48 cases have been reported during that time. But the state authorities waited ten years with special interest watching for a case from Tulare County, until in 1937 two cases were reported in that one year. Altogether there have been just six cases *ever* reported to the State Department from Tulare County, and in one of these the infected person had been skinning rabbits in Missouri. Since another case was the one reported in 1944, there remain only four cases, over a period of about 20 years, with officially established diagnostic reports, which in my opinion can be considered as probably having their source in Tulare County.

After the work of Francis in 1919 it was known that the *Pasteurella tularensis* definitely caused the disease in humans.[2] In scanning works upon the subject I get the impression that Foshay has given us more information than anyone else in recent years.

Tularemia has sometimes been called Francis' disease, deerfly fever, rabbit fever, Ohara's disease, and several other names.[3] The common methods of contracting infection with *Bacterium tularense*, such as skinning or dressing wild rabbits or squirrels, tick or horsefly bites, animal bites, and laboratory infections, are added to by numerous and various contacts with many kinds of other animal life.

The disease can be caught by handling infected animals with no known abrasion of the skin being necessary, by ingestion of infected and insufficiently cooked flesh, and probably by inhalation.

FORMS OF THE DISEASE

Numerous forms of the disease are described, but for practical purposes they may usually be divided into the ulceroglandular, the typhoidal, and the pneumonic.

The incubation period is one to ten days, with two to four days the usual.[3] The onset is quick or sudden and in most cases of all types is ushered in with fever, chills or chilly sensations, extreme fatigue, generalized muscular pains, slight nausea and some headache. At times diarrhea is an early symptom. Some cases are preceded briefly by malaise or cough. The first few days of fever are often followed by an intermission that may be misleading, as after a few more days fever returns.

In the most common type, the ulceroglandular, a painful papule or other small swelling appears at the contaminated area as the primary lesion, many times on the finger or hand, and quickly thereafter the regional lymph nodes (for instance the arm and axilla from a primary finger lesion) enlarge and be-

come painful and tender. The primary sore becomes an ulcer; the lymph nodes continue to enlarge and eventually often suppurate. (Recent treatment may alter this course.)

In the pneumonic type, which seemingly may be primary or come in connection with the typhoidal or another form, there is cough, and sometimes pain in the chest. Fever is variable in height. The patients are usually profoundly sick. It is wise in some cases that give the appearance clinically of an atypical or virus pneumonia to test for tularemia.

In the typhoidal type there is usually a high fever, repeated chills, mental flightiness or an irrational condition, and in fact often a very dangerous picture.

Beckman [2] says (and I am assuming he means before streptomycin was used for tularemia) that the mortality rate of tularemia is considered to be about 6 per cent. Foshay and Pasternack [6] state that the disease (that is, I feel sure of course they mean before the use of streptomycin for it) usually causes: 31 days of fever; 31 days in bed; four months' duration of disease characterized by buboes for 3.5 months, disability for 3.5 months; and a healing time of 39 days for primary lesions.

Laboratory findings are of great value in diagnosis. The agglutination test is carried out. Literature upon tularemia mentions titers going up into the thousands at times and usually into at least the hundreds. Howe et al.[8] noted that laboratory workers who by immunization had a previous titer of 1:320, which went down at the onset of the febrile stage or shortly thereafter to 1:80 or even 1:20, later had it go up into the hundreds or the thousands. The agglutination test is usually not of value until about the second week of illness, but the intradermal test of Foshay gives a positive reaction earlier. Animal inoculation from the blood, sputum (in tularemic pneumonia), or bubo of a patient, and isolation and cultivation of the *Pasteurella tularensis* from the animal lesions is of course used. The leukocyte count runs from normal to a slight or a moderate leukocytosis.

Prevention of tularemia obviously is best accomplished by avoidance of contamination. Those who dress rabbits should wear rubber gloves. The flesh of rabbits should be well cooked. Immunization is probably at best only partially accomplished by the vaccine injections of Foshay. Although all of the seven patients recently reported by Howe et al.,[8] who were accidentally infected during the course of their laboratory work, had previously received Foshay tularemia vaccine, the authors said that the vaccination may have modified the disease. An attack of the disease confers immunity.

TREATMENT

Treatment in the past has included numbers of the older drugs, serum made from horses and goats, and even excision of the primary ulcer. The sulfonamides and penicillin have of course been tried. All of the foregoing have been found useless or of only doubtful or occasional value, except possibly the Foshay serum. Beckman,[2] however, reminds us that although the United States Public Health Service said in April, 1940, that there is not any specific treatment for tularemia, Foshay still made claims for his antiserum although even he did not advise it as a routine measure. Foshay and Pasternack [6] reporting the treatment of seven tularemia patients with streptomycin include in their paragraph comparing streptomycin with serum therapy the following statement: "Although we have records of serum treated patients that compare favorably with any recorded here, we could not match them by selecting any seven case records at random."

So, we arrive at what seems by evidence, at least thus far, to be the greatest advance in treatment of tularemia—the use of streptomycin.

Before entering more upon a discussion of streptomycin it should be mentioned that incision of the abscesses resulting from buboes is often necessary and extremely valuable, but should usually not be done until they are far advanced. The use of streptomycin shows indication, if given early, of heading off the formation of abscesses in a large percentage of cases. The common ulceration of even the primary sore is said to be prevented often in cases where streptomycin is used.

Foshay and Pasternack,[6] in the already mentioned report of seven cases of tularemia treated with streptomycin, noted that six of their patients were relieved of the distressing general symptoms of headache, mental dullness, sense of prostration, arthralgias, myalgias, chills or chilly sensations, and nausea, before the end of the first day of treatment, and that by the end of the second day this effect was striking. In addition to these six cases there was one of pneumonic type with resolution following hyperimmune goat serum that later showed trouble due probably to splenitis and the perisplenitis followed by peritonitis. When this patient was given streptomycin beginning on the 103rd day of the disease, she appeared to have a late and serious aspect of the disease rather dramatically favorably influenced, and not many weeks later she appeared to be in perfect health.

In August, 1946, Cohen and Lasser [4] reported the successful treatment with streptomycin of a case of primary tularemic pneumonia in which the patient had been considered moribund. Penicillin and sulfonamides had not been effective.

In August, 1946, Peterson and Parker [10] reported a case of tularemic pneumonia first treated, without benefit, with penicillin. On the eleventh day the diagnosis of tularemic pneumonia was made, penicillin was stopped, streptomycin started, and dramatically fine sequences were observed.

Also in September, 1946, Gordon [7] reported a case of typhoidal type of tularemia with tularemic pneumonia in which the patient showed no benefit from penicillin or sulfadiazine, but improved rapidly when treated with streptomycin.

CASE REPORT

A report of my case follows:

A 37 year old man called at my office on June 11, 1946, complaining of a sore between the middle and ring fingers

of the left hand, and of slight soreness in the left arm and left axilla. The only past history obtainable at that time was that the patient had noticed the sore a few days before and thought he had scratched his hand in some way on the ranch although he could not remember when. He apologized for coming for such a small reason.

Physical examination revealed a well-nourished, cheerful-appearing man who walked briskly into the office. The temperature was 99°F. On the web between the middle and ring fingers of the left hand was a slightly raised rounded area a little less than 1 cm. in diameter at its base (Figure 1). The epithelium appeared to be intact. There was slight enlargement and slight tenderness of lymph nodes on the medial side of the left arm and in the left axilla (Figure 2).

The picture was so like many of the ordinary accidental infections seen that a protective dressing was applied to the hand, and a sling to keep the extremity quiet was offered but was refused by the patient as superfluous. In two days when the patient returned, the hand infection had begun to ulcerate slightly and the lymph nodes were sorer and very slightly larger. The man had been advised not to work but he said he felt all right and continued to do so. He was doing physical work and driving an automobile. His temperature, however, was 100.4°F. Hospitalization to afford further study of the case as well as treatment was recommended but refused. Laboratory tests, including the agglutination test for tularemia, also were refused. Three hundred thousand units of penicillin in oil and wax was given in an intramuscular dose on two different days. A day or so later a severe urticarial rash broke out over all the patient's body, and it was accompanied by intense itching, a temperature of 102°F. and severe joint pains. The rash seemed an allergic one, so the penicillin formula, considered a likely cause, was not given again.

(Months later the man was given penicillin in the same manner and dosage for one dose for an infection not related to the tularemia, and no reaction occurred.) The patient still refused to go to the hospital or laboratory but was unable to work. The rash and joint distress stopped following some benadryl. The patient returned on June 17 and upon close questioning (also possibly because distress of the itching rash had greatly impressed him) admitted that on June 8 and 9 he had had chilly sensations and fever, slight headache, general indisposition, and a definite diarrhea. Even more significantly, he recalled that on June 2 he had skinned a jack rabbit. Then he did go to the laboratory, and agglutination was positive 1:160 for tularemia. Following that, the laboratory of the California State Health Department and also the laboratory of the Tulare County Health Department reported positive for tularemia with titers of 1:160.

In the meantime the primary sore on the hand had fully ulcerated and was fairly well along toward healing. The buboes had both enlarged and become more tender. The patient's general condition was fairly good, but the axilla and arm caused considerable distress. The lymph node in the arm attained about 3 by 4 cm. in diameter with swelling of the surrounding tissue in addition; the axillary bubo was smaller, but both were enlarging.

Streptomycin was impossible to obtain here privately at that time, so I arranged to get the patient into the Tulare County General Hospital and urged that streptomycin be obtained, if possible, through that institution. I advised that it be given according to the ideas of Foshay and Pasternack.[6] The patient delayed a number of days before entering the hospital on July 3, the 25th day of the illness. He was given sulfadiazine. There was no streptomycin yet obtainable. The next reported titer was 1:160. The titer on blood taken July 17 was 1:320. About 22 days after hospitalization began, streptomycin was obtained and given by intramuscular injections of 1 gm. divided into eight doses a day for 40 doses.

On July 15 an abscess of the axilla had been incised and a large amount of green pus was expelled, drainage from this opening continuing to the end of hospitalization. While

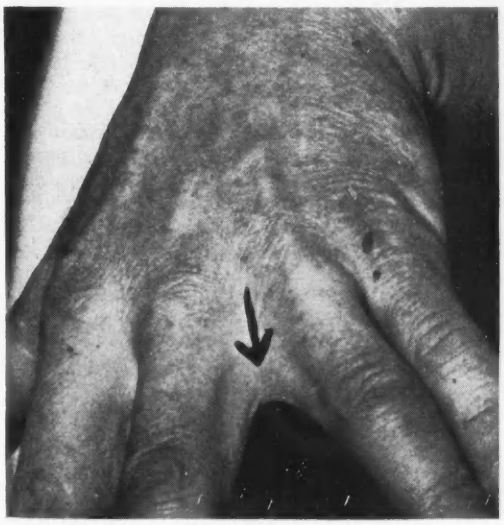

Figure 1

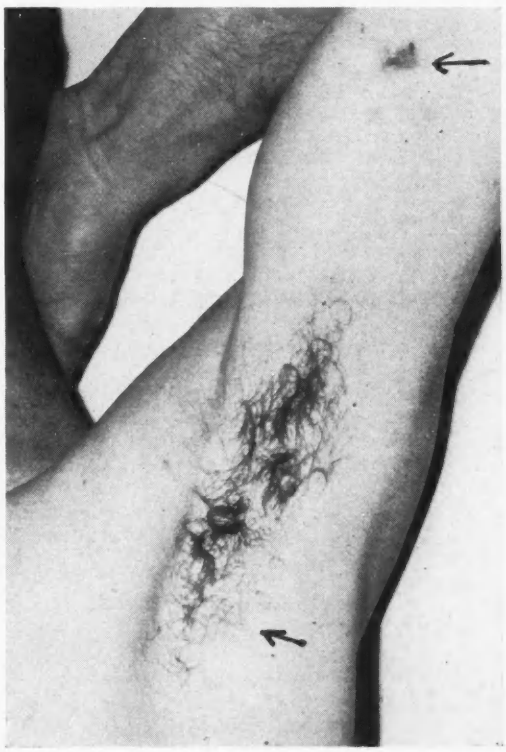

Figure 2

in the hospital the patient felt well and his temperature fluctuated between 97° and 99.4°F. After drainage of the axillary abscess the swelling slowly subsided in that area but little change was seen in the arm swelling until streptomycin was started, when it began to subside. On August 17 a fluctuant area on the medial side of his arm was opened and some thin yellow fluid expressed. On October 17 this last-mentioned wound still showed a slight watery discharge, which the patient states ceased very shortly thereafter. The patient left the hospital on July 30 and went to work on August 15. The leukocyte count which had been 15,750 in early July dropped to 11,000 in early August. Incidentally, in February, 1947, leukocytes numbered 11,400, hemoglobin was 75 per cent, erythrocytes numbered 4,420,000, urine was normal, and the blood showed a positive agglutination titer for tularemia 1:320. The patient looked and said he felt well.

CONCLUSION

The entire subject of tularemia has many important phases, but it is especially interesting to call attention to two of them. First, that tularemia seems to be rare in Tulare County, California. Second, there is accumulating evidence which thus far strongly suggests that streptomycin arrests tularemia in a high percentage of cases, especially if used in the acute stage, although there is some evidence of its later usefulness, and that at least in the light of recent reports it has lighted the way toward new possibilities.

Valuable assistance was given in the preparation of this article by I. M. Stevens of the California State Department of Public Health, Inez Gray of the Tulare County Health Department, and Dr. Robert P. Klinefelter of the Tulare County General Hospital.

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The Treatment of Epilepsy with Methylphenylethyl Hydantoin (Mesantoin)

ROBERT B. AIRD, M.D., *San Francisco*

GREAT progress in anti-convulsive therapy has been made in recent years. With the development of experimental techniques for measuring convulsive thresholds[7,9] and the widespread awakening of interest in the clinical treatment of convulsive states,[3] a number of anti-convulsive agents have been found and tested. Dilantin remains by far the most important of these new agents. Nevertheless, dilantin possesses definite limitations, both with respect to its efficacy in the convulsive states of many patients and because of its toxic effects. When, therefore, another hydantoin derivative of experimental promise was made avaliable in 1945,* it became a matter of considerable interest to us to evaluate its clinical potentialities. The following report presents our experiences in the past two and one-half years with methylphenylethyl hydantoin (mesantoin) in 75 patients.

Several recent reports[2,4,10] on methylphenylethyl hydantoin indicate that the toxicity of this agent is relatively slight and that it possesses strong anti-convulsive properties in convulsive states of the grand mal and psychomotor types.[2] A more detailed consideration of these reports is presented in the Discussion in connection with a comparative analysis and evaluation of the results of this study.

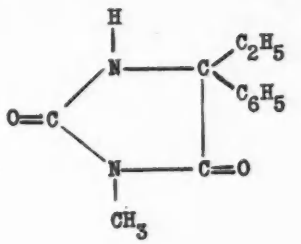
MATERIAL AND METHODS

Methylphenylethyl hydantoin (mesantoin) is 3-methyl-5, 5-phenyl-ethyl-hydantoin. The structural formulas of this hydantoin compound and of the sodium salt of diphenylhydantoin (dilantin) are shown in Figure 1.

Comparative studies on the anti-convulsive and toxic action of methylphenylethyl hydantoin have been made in experimental animals by Swingard and Goodman.[10] These authors state that this agent has a protective index (ratio of toxic dose to protective dose) of 12, as compared with an index of 2 for sodium diphenyl hydantoinate. Mesantoin raised the convulsive threshold of normal rats to electric shock by 27 per cent, whereas they obtained only a 2 per cent change with sodium diphenyl hydantoinate.

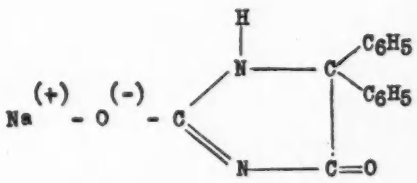
Aside from this, the slow absorption of mesantoin, and the studies of Von Fischer and Staub[11] on the distribution and elimination of ethylphenyl hydantoin, little is known as to the physiology, biochemistry or pharmacological mechanism of action of the hydantoin on the central nervous system. Although clinically, the hydantoins have but a slight depressant effect on the brain, their anti-convulsive action and their related beneficial effect on behavior disorders of childhood[5,8] and on the behavior of many epileptics is striking.

The 75 patients with convulsive states included in this study were selected because of their failure to respond to other therapeutic measures, including a trial of dilantin, or because they had demonstrated evidence of dilantin toxicity, which made it impractical to use this anti-convulsive agent either at all or in doses adequate to control their convulsive states. The group consisted of 48 patients with convulsive states of undertermined origin (idiopathic) and 27 patients with symptomatic or secondary convulsive disorders, including 18 with Jacksonian convulsive states. Routine clinical studies, including a history and physical and neurological examinations were obtained in all patients. Electroencephalograms were



3-methyl-5,5-phenyl-ethyl-hydantoin

(Mesantoin)



Sodium diphenylhydantoinate

(Dilantin Sodium)

Figure 1.— Structural formulas of methyl-phenyl-ethyl-hydantoin (Mesantoin) and sodium diphenylhydantoinate (Dilantin Sodium).

Read before the section on Neuropsychiatry at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

From the Department of Surgery, University of California Medical School, San Francisco, California.

* Courtesy of the Sandoz Chemical Works, Inc., New York, N. Y.

obtained on all patients. Pneumoencephalograms were performed on 45 patients.

Combined forms of seizures occurred in 31 of the 49 patients with essential epilepsy and in 17 of the 27 patients in the secondary or symptomatic group. Altogether 135 forms of convulsive states occurred in this group of 75 patients. Their classification is presented in Table 1.

TABLE 1.—*Types of Convulsive States Studied in 75 Patients*

Convulsive State	Primary (Ideopathic) No.	%	Secondary (Symptomatic) No.	%	Total
Petit Mal	35	42	13	25	48
Psychomotor	8	10	6	11	14
Grand Mal	40	48	15	29	55
Jacksonian	0	0	18	35	18
Total	83	100	52	100	135

The severity of convulsive involvement was graded as either moderate or marked, no slight cases being included in the group owing to the method of selection of patients. Of the patients with primary and secondary types of convulsive disorders, 81 per cent and 82 per cent, respectively, were considered to have severe convulsive disorders.

In all instances, mesantoin was added without altering other therapeutic measures that might influence the convulsive state. For this reason, the pure hydantoin derivative was used rather than Hydantal,† a preparation containing both phenobarbital and mesantoin. Standardization of the therapeutic regimen, prior to the time mesantoin was added, included control of the water balance (slight dehydration) and acid-base balance (neutral to slight acidosis), elimination of alcohol, stimulants and foci of infection, adequate bowel regulation, and regulation of environmental factors insofar as was practical. The optimal dose of other therapeutic agents, such as mebarol, phenobarbital, tridione, glutamic acid, etc., was established prior to the addition of mesantoin, as mentioned, and maintained at the same level, in order to facilitate evaluation of the anti-convulsive action of methylphenylethyl hydantoin.

The hydantoin derivative was added in small doses, 0.1 gm. one, two, or three times per day, depending upon the size and age of the individual and the dose of dilantin for which it was being substituted. Subsequently, the dose of mesantoin was gradually increased until spells were controlled, toxic effects developed, or no further benefit was obtained by increasing the dose. The dose in adults averaged 0.3 gm. with occasional patients receiving as high as 0.6 gm. per day.

RESULTS

In order to facilitate an analysis of the therapeutic value of mesantoin, its effects have been classified in four categories as follows:

1. *Toxic effects* varied considerably in the seven patients in whom they were observed. Subjective complaints included headaches, nausea, listlessness, drowsiness, and dizziness. "Nervousness" and "a sense of fullness in the head" were additional complaints, each occurring in one instance. Objective disturbances consisted of vomiting, fever, rash, and lethargy. Nightmares, accentuation of the convulsive state, and an aplastic anemia resulting in death (see Discussion) were each observed in single instances. The hydantoin derivative was discontinued in all seven patients because of one or more of the above undesirable effects.

2. *No Effect:* This group includes convulsive disorders in patients in whom neither toxic nor beneficial effects could be detected.

3. *Slight to Moderate Effect:* This group comprises those convulsive states which were definitely benefited by the addition of mesantoin or its substitution for dilantin, but in which the effect was of moderate degree and could not be classified in the next group.

4. *Great Effect to Control:* This group includes convulsive states which were completely or almost completely controlled over a period of six or more months of observation in patients with convulsive disorders of severe degree which had been controlled but poorly by other measures. The period of observation in "controlled" patients necessarily depended upon the frequency of spells. Those patients whose spells were infrequent were observed over longer periods and were not considered "controlled" until they had been "protected" against at least 20 expected spells. The occurrence of rare spells in those patients greatly benefited by mesantoin was explained in most instances by their deviation in some respect from the prescribed regimen.

Table 2 shows the therapeutic effects obtained with methylphenylethyl hydantoin in the 75 patients included in this study. The beneficial effects were not subdivided into the categories "Slight to Moderate" and "Great Effect to Control" in as much as a high percentage of the patients had combined forms of convulsive states which responded in different degree depending upon the types of convulsive state involved. Many patients presenting both grand and petit mal, for example, showed striking benefit insofar as their major seizures were concerned, but little or no benefit on their minor spells. Correspondingly, an analysis with respect to the type of convulsive disorder rather than with respect to the patient seemed essential to present the results of this study in fair perspective. On this basis the results obtained in the

TABLE 2.—*The Anti-Convulsive Effects of Methyl-Phenyl-Ethyl-Hydantoin in 75 Patients with Convulsive States*

Convulsive State	Therapeutic Effects: Toxic No.	%	None No.	%	Beneficial No.	%	Total
Primary (Idiopathic)	3	6	6	13	39	81	48
Secondary (Symptomatic)	4	15	2	7	21	78	27
Total	7	9	8	11	60	80	75

† Sandoz Chemical Works, Inc., New York, N. Y.

TABLE 3.—*The Therapeutic Effects of Methyl-Phenyl-Ethyl-Hydantoin in Various Types of Convulsive States*

	Therapeutic Effects								
	Toxic		None		Slight and Moderate		Great and Controlled		
Convulsive State	No.	%	No.	%	No.	%	No.	%	Total
Petit Mal	6	13	26	54	9	19	7	15	48
Psychomotor	1	7	2	14	4	29	7	50	14
Grand Mal	5	9	6	11	13	24	31	56	55
Jacksonian	2	11	2	11	4	22	10	56	18
Total	14	10	36	27	30	22	55	41	135

TABLE 4.—*The Therapeutic Effects of Methyl-Phenyl-Ethyl-Hydantoin in Primary and Secondary Types of Convulsive States*

	Therapeutic Effects								
	Toxic		None		Slight and Moderate		Great and Controlled		
Convulsive State	No.	%	No.	%	No.	%	No.	%	Total
Primary (Ideopathic)	5	6	24	29	17	20	37	45	83
Secondary (Symptomatic)	9	17	12	23	12	23	19	37	52
Total	14	10	36	26	29	22	56	42	135

135 types of convulsive states found in the 75 patients of this study are shown in Tables 3 and 4. Table 3 shows the therapeutic effects of mesantoin in the various types of convulsive states regardless of their etiology. Table 4 shows the results when the types of seizures are grouped in accordance with their primary and secondary clinical classification.

From Table 4 it may be seen that the overall effect of the hydantoin derivative is essentially the same, regardless of etiology. An analysis according to the types of spells (Table 3) shows that the results are essentially comparable, except for the degree of benefit obtained in petit mal as opposed to the other types of spells. Fifty to 56 per cent of the convulsive states other than petit mal were markedly benefited or controlled, whereas only 15 per cent of petit mal seizures were markedly benefited. Since the incidence of petit mal was 42 per cent and 25 per cent in the primary and secondary groups, respectively, and the benefit derived from the hydantoin derivative was essentially the same in the primary and secondary groups or, if anything, slightly greater in the primary group (Table 4), it is obvious that the relatively poor effect of the derivative on petit mal cannot be explained on an etiological basis. An analysis of the data from the standpoint of the age incidence of petit mal shows that the relatively poor results obtained in this condition with the hydantoin might be explained only in part on this basis. The incidence of petit mal and other forms of convulsive disorders in the two age groups 1-20 years and 41 or more years, is shown in Table 5. The relative therapeutic effectiveness of the derivative in these same age groups is shown in Table 6. This same point may be stated in another way, namely, that the better results obtained with the derivative in adults can be explained only partially by the slightly lower incidence in the adult group of petit mal, in which condition the hydantoin proved less effective.

TABLE 5.—*Incidence of Petit Mal and Other Forms of Convulsive Disorders in Young and Old Age Groups*

	Petit Mal		Other Convulsive States		
Age Group	No.	%	No.	%	Total
1-20 years	23	38	38	62	61
41 years and over	8	32	17	68	25

TABLE 6.—*The Therapeutic Effectiveness of Methyl-Phenyl-Ethyl-Hydantoin in Young and Old Age Groups*

	Therapeutic Effects						
	Toxic or No Effect		Slight and Moderate		Great and Controlled		
Age Group	No.	%	No.	%	No.	%	Total
1-20 years	24	38	13	21	26	41	63
41 years and over	5	22	2	9	16	69	23

DISCUSSION

Because of the method of selection of patients for this study, it is difficult to obtain a fair evaluation of the therapeutic value of mesantoin in the convulsive states. However, the fact that only 9 per cent of this group developed toxic symptoms, whereas 47 per cent of the same group had shown toxicity to dilantin, is impressive. Likewise, it is striking that only 11 per cent did not show some benefit from the hydantoin derivative, whereas 53 per cent of the group previously had not been benefited by dilantin. These results, in combination with the high percentage of convulsive states (42 per cent) that were either greatly benefited or completely "controlled" clearly indicate that methylphenylethyl hydantoin is an agent of relatively great therapeutic value and low toxicity. It is entirely possible that even more striking results might have been obtained in an unselected group of patients with convulsive states. It seems reasonable to conclude that mesantoin is a valuable substitute for dilantin when the latter proves toxic or inadequate, and in general use on unselected patients may prove as effective as dilantin or even more so.

The toxicity of the hydantoin derivative cannot be evaluated from this study. Nearly half of the group selected for the study had proved toxic to dilantin. Of the seven patients who proved toxic to

the derivative, four had previously developed a toxic reaction to dilantin. Although it is obvious that one may not draw conclusions from such limited data, certain points are worthy of comment in this connection. The derivative was added to a regimen that previously had not proved toxic, or substituted for dilantin without alteration of the other aspects of the regimen after the dilantin had proved toxic or of no benefit. In each instance, the derivative was added in relatively low doses and increased cautiously. The patients were warned to discontinue the "new medicine" at once if any alarming symptoms developed and to report immediately such occurrences. It is conceivable that except for this cautious approach the incidence of toxicity might have been appreciably higher. In most patients, doses of 0.2-0.4 gm. of the derivative per day were used. Higher doses (up to 0.6 gm. per day) were resorted to in only a few instances.

That the derivative may be dangerously toxic in rare instances is indicated by the following case report:

A single woman 26 years of age had suffered from a severe convulsive disorder of the petit and grand mal types following a head injury and the removal of a "blood clot" at the age of ten months. Weakness of the right hand and "knee" slowly improved as the child developed and there were no further spells until the age of eight years, when petit mal spells were noted and increased in frequency to three or four per day. A pneumoencephalogram at the age of 12 years had been reported as normal.

Right Jacksonian seizures occurred when she was 14 and 15 years of age. The attacks were rare thereafter until she was 18 years of age, when they occurred some three or four times a day. At 22 years of age she was placed upon phenobarbital and the seizures diminished in frequency to two or three per month.

Past History: Non-contributory, aside from pneumonia twice in childhood.

Family History was negative for convulsions and migraine.

Physical and Neurological examinations were essentially normal aside from (1) an old scar in her left temporoparietal region; (2) slight underaction of the right lower face; (3) deviation of the tongue to the right; and (4) slight weakness of the right grip.

X-rays of the skull showed an irregular area of decreased density in the lateral portion of the left parietal bone, which was not associated with vascular markings and which was interpreted as a "defect . . . which may be due to a leptomeningeal cyst," but which was probably an old burr hole.

Electroencephalograms appeared within the limits of normal aside from suggestive focal changes in the temporo-occipital and possibly other adjacent areas on the left.

Routine laboratory studies were normal.

A diagnosis of convulsive state of post-traumatic origin was made and the patient was placed upon a regimen of phenobarbital, 0.06 gm. t.i.d., and dilantin, 0.1 gm. b.i.d. Although this helped to some degree, the patient still experienced two or three seizures per month. Institution of a restricted fluid intake, an acid-ash diet, bowel regulation, elimination of stimulants, etc., did not greatly alter the results. The substitution of mebarol, 0.1 gm. q.i.d., for the phenobarbital produced no marked alteration of the convulsive state, but resulted in a more alert, cooperative, and active patient.

The hydantoin derivative, 0.1 gm. t.i.d., was next substituted for the dilantin, other factors being maintained constant. This greatly benefited the patient's condition as indicated by the fact that there were only one or two slight spells per month. A severe attack of scarlet fever was associated with one more severe seizure.

Six months later, in an effort to achieve a more complete control of the convulsive disorder, the dose of the derivative was increased to 0.1 gm. q.i.d. The dose of mebarol was not changed. The patient did well for six weeks. Menses occurred in apparently normal fashion during this six-week period and lasted from three to four days. Prior to this she had not menstruated since the severe attack of scarlet fever five months earlier. Six weeks after the increase in the dose of the derivative, seven and a half months after the derivative therapy was initiated and without other known cause, vaginal bleeding began. This persisted and within a week resulted in a severe anemia. Hemorrhagic spots approximately ½ inch in diameter appeared in the skin of the body. She was hospitalized.* Physical examination showed, in addition to marked pallor, the hemorrhagic spots, and vaginal bleeding, a systolic murmur in the aortic area and a small area of tenderness over the left adnexal region. The blood count showed 1,140,000 erythrocytes, 2,500 leukocytes, 23 per cent hemoglobin, marked hypochromia and a differential count of 2 polymorphonuclear cells and 98 lymphocytes. The color index was .73 and .86 on two successive days. Her blood was type IIA and Rh negative. The clotting time was 5 minutes, the bleeding time 11½ minutes. The prothrombin time was 100 per cent of normal. Kahn and Kolmer tests were negative. Blood cultures showed no growth in 48 hours. In spite of daily blood transfusions, bleeding continued and subconjunctival hemorrhages and ecchymosis of the eyelids developed on the third day of hospitalization. Daily blood counts showed no essential change in the blood picture during the period of hospitalization. On the fourth hospital day extensive retinal hemorrhages developed. The temperature averaged 104.6° to 106° F. The patient died five days after she was hospitalized. The final diagnosis was "aplastic anemia." Autopsy was refused.

This patient's course, with delayed, sudden onset and rapid progression to a fatal termination in spite of all supportive therapy, is similar to that of the patients reported by Harrison, Johnson and Ayer [1] and Mackay and Gottstein.[6] The patient of Harrison, et al., had received mesantoin as well as tridione.

Comparison of the results obtained in this study with the results of others indicates certain salient parallels and differences. The drowsiness and skin rash reported by Kozol,[2] Lennox [4] and others were encountered rarely in the present series. This is presumably explained by the fact that mesantoin was started in low doses, only gradually increased, and but rarely employed in doses above 0.4 gm. per day. As Kozol has stated, these effects can usually "be eliminated or obviated by gradual increases in dosage."

Sixty-five per cent of Kozol's patients "with predominant grand mal" and 78 per cent (seven out of nine) "with predominant psychomotor" seizures were substantially improved. In the present study 80 per cent of the grand mal seizures and 79 per cent of psychomotor seizures were benefited. The difference of results in grand mal are probably more apparent than real and explained by the difference

* Information on the terminal phase of this patient's case history was obtained through the courtesy of Dr. C. Y. Gates and the Mary's Help Hospital.

in classification or grouping. Whereas Kozol considers "patients with predominant grand mal," the grouping in this study, for reasons previously mentioned, was made on the basis of the type of convulsion rather than the predominant type per patient.

Sixteen patients with petit mal appeared to be benefited by the addition of mesantoin. Only seven of this group, however, were markedly improved, so that considering the complexities of the study, one is not justified in drawing conclusions from this limited experience.

Perhaps the biggest difference between the present series and the other studies to which reference has been made, lies in the methods of treatment. Whereas Lennox used comparable doses without other anti-convulsive agents and Kozol used some combinations of drugs but higher doses of mesantoin, great stress was laid in the present series on obtaining the maximal benefit possible from other anti-convulsive agents. One or more of the following anti-convulsive agents were used in combination with mesantoin: phenobarbital, mebarol, delvinal, tridione and glutamic acid. The optimal doses of these agents were worked out before mesantoin was tried and dosage of them maintained as mesantoin was added. This was done not only to obtain as much benefit as possible for the patient, but to maintain the conditions as constant as possible. Regulation of the water and acid-base balance, etc., was also undertaken as part of the standardized regimen. This appears to be the only possible explanation for the fact that results comparable to those obtained by Kozol were obtained in the present study with doses of mesantoin considerably lower than those he employed. The fact that the results obtained in this study are appreciably better than those reported by Lennox would seem best explained on this same basis, since the dose levels of mesantoin employed by Lennox were approximately the same as those used in this series.

CONCLUSIONS

1. Methylphenylethyl hydantoin was used in 75 patients with convulsive states in whom the sodium salt of diphenylhydantoin had proved ineffective or toxic. Other anti-convulsive agents used with mesantoin were given in the same optimal doses and combinations that had been worked out prior to the addition of the new agent. Other conditions were standardized (the regimen included regulation of other factors possibly influencing convulsive reactivity, such as the water and acid-base balance, etc.) and were maintained in order to facilitate the evaluation of the new hydantoin derivative.

2. Toxic symptoms appeared in seven patients and the hydantoin derivative produced no appreciable benefit in an additional eight patients. Eighty per cent of grand mal seizures were improved (24 per cent moderately and 56 per cent greatly), 78 per cent of Jacksonian seizures were helped (22 per cent moderately and 56 per cent greatly), and 79 per cent of psychomotor seizures were benefited (29 per cent moderately and 50 per cent greatly). Sixteen patients with petit mal appeared to derive some benefit but the improvement was marked in only seven of these. The limited results on petit mal in addition to the complexity of the study forbid any final evaluation of the hydantoin derivative in petit mal. These results are comparable with the results obtained in other studies on this new anti-convulsive agent. Differences are discussed.

3. The great value of mesantoin in convulsive states other than petit mal and its relatively low toxicity, suggest that it will prove a valuable substitute for dilantin, and in unselected patients may prove as effective as dilantin or even superior to it.

4. Although of low toxicity in general, if used cautiously, mesantoin may be associated with alarming toxic symptoms. One fatal case of aplastic anemia in this series is reported.

DISCUSSION BY EUGENE ZISKIND, M.D., LOS ANGELES

No medicinal remedy, to date, has been devised that will completely repress the attacks in the majority of epileptic patients, although it is equally true that almost all are helped to some degree. The practical problem in therapy, therefore, is to find the drug, or combination of drugs, which will give the greatest degree of control. This is a time consuming, tedious process in most instances. Often it takes a matter of years, and probably in many cases the optimum combination of drugs specific to the individual is never even reached in the cumbersome, prolonged, trial and error procedure which is present day practice. It is therefore particularly significant that Dr. Aird's report covers a two and one-half year period with 75 cases.

It is furthermore logical that a new remedy be tried first only where others have failed. Combination therapy is often more successful than treatment with one drug, since it apparently is true that the anti-convulsant effects may be additive or synergistic, whereas the side reactions and intolerance of each of the combined drugs need not be. Hence Dr. Aird's demonstration of enhanced therapeutic benefit from the addition of mesantoin to maximum other dosage gives this drug decided practical value. Since the studies of Aird, Kozol, and Lennox have each further shown that mesantoin has been of value in cases where the other drugs had to be discontinued, one can say the time has now arrived where it will be legitimate to start new cases out with mesantoin alone so that comparisons can be made directly with dilantin and phenobarbital.

Although we are engaged in a comparative project with the group at the Cedars of Lebanon Hospital with Drs. N. Bercel, B. Finesilver and P. Solomon, on the effect of this drug, I will comment only on the 41 cases seen by Dr. Somerfeld and myself in private practice since July of 1946. Most of our cases were transferred entirely, though gradually, to mesantoin after they had not obtained complete control with maximum dosage of other drugs. A few patients were given mesantoin to the point of tolerance, 1 gm. (9 tablets), and many received 0.6 gm. Our experience has been too brief in many of our cases to place too much reliance on the statistical analysis. One third were definitely better on mesantoin than on any other medication tried, seven of these having no attacks during a greater period than the period of freedom from seizure immediately preceding the change to the new drug. One fourth of the group (ten cases) had the drug discontinued and the remainder included many who were improved but the duration of the new therapy was too short to be signficant.

Our record of toxic reactions may be of interest: agranulocytosis (one case going on to recovery after cessation of the drug); pronounced visible enlargement of the cervical

glands (two cases with reproduction in each instance after a free interval, by readministration of the drug); interference with sexual function or desire (four cases); rash (one case); drowsiness (four cases). On the other side of the picture should be mentioned the feeling of well-being in patients helped most by the drug. In one instance a child with marked behavior disturbance underwent such dramatic improvement that he seems to be an entirely different individual. Likewise, the repeated disappearance of gum hypertrophy from dilantin is very gratifying.

All told, mesantoin would appear to be a formidable addition to the therapy of epilepsy, and Dr. Aird's timely, well thought out and comprehensive contribution, in addition to those of his predecessors, now opens the way to the final stage of analysis of this drug, namely, the comparison of its activity on a free trial in other than the worst cases.

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Acute Puerperal Mastitis—A Review

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A REVIEW of the literature on acute puerperal mastitis discloses that interest in the mammary gland has not adequately extended to mammary afflictions in the postpartum period. Only 74 significant papers since 1649 were found upon which to report. Ambrose Paré first reported the use of alum-water and lead nipple shields in the treatment of afflictions of the postpartum breast. Unfortunately, little progress has been made since then in relieving the discomfort of infantile traumatization of fissured nipples. Therefore an attempt will be made here to present in as logical form as possible the progress that has been made in ministering to this important complication of breast feeding. The papers concerned in this review have been combined in an effort to present a logical report with some semblance of continuity.

Initially, it may be of interest to investigate the incidence of mastitis to determine how much of a problem this complication of the puerperium presents. Geschicter in his book on Diseases of the Breast quotes an average incidence of infection in the postpartum breast of 2 per cent with ½-1 per cent abscess formation. In a series of 4,568 obstetrical cases at Woman's Hospital and New York Infirmary for Women, reported by McIntosh,[11] there was mastitis in 3.3 per cent and abscess formation in 0.7 per cent. Dippel and Johnston [2] reported abscess formation in 0.55 per cent of 20,258 postpartum women. We, at the University of California Hospital have observed 79 cases of acute mastitis over the last ten years in 7,453 women after delivery, a percentage of 1.04; and abscesses developed in only three cases, which gives us an incidence of 0.04 per cent for that complication. Combining these results we find that there is an incidence of acute mastitis of 2.1 per cent, and that 27 per cent of those who have the disease develop breast abscesses. Hence, we see that the problem is of sufficient frequency of occurrence to warrant our careful attention.

The etiology, for purposes of discussion, can be considered under three headings; (1) predisposing factors, (2) specific micro-organisms involved, and (3) direct causative factors.

Under the first category, it seems that parity plays a definite role. McIntosh [11] reports that 59.2 per cent of her patients were primigravidae. Moon and Gilbert [12] report 75 per cent, while at the University of California Hospital 57 per cent of the cases were in women having their first child. As to race, there is little predeliction shown. Dippel and Johnston [2] report 55 per cent of their cases in white patients, while our cases showed a very slight tendency in the opposite direction: 1.1 per cent of our negro patients developed mastitis as compared with 0.94 per cent of our white patients. A series of interest,[4] consisting of 1,176 cases reported by a Scottish clinic, shows that 77.6 per cent of cases of mastitis developed in hospitalized patients as compared with 22.4 per cent in cases delivered at home. Although I could find no statistics on this point pertaining to our own country, I should imagine the disparity would be much less; and probably reversed. Two factors to be mentioned are an increased incidence in winter and spring, and a supposed predeliction of the disease for blondes or those having red hair. Hence, the most likely candidate for mastitis would seem to be a blond or redheaded primipara delivered in the winter or spring under hospital care.

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INFECTING ORGANISMS

In the second category, the specific organism involved, we have to do with a familiar group of bacteria. The fact that this familiar group of bacteria is a frequent causative agent of mastitis may not be mere coincidence. By far the most common offender is the staphylococcus aureus. It was found in 73 per cent of a series at Johns Hopkins,[2] and in approximately 75 per cent of Smith's series.[13] The less common organisms found, in order of their frequency, are staphylococcus albus, a normal skin saprophyte, streptococcus hemolyticus, often followed by streptococcus viridans. Such entities as tuberculous and actinomycotic abscesses must be mentioned only in passing. The staphylococcus aureus infection presents the usual picture of a fulminating local process with only moderate systemic reactions, but it is the most likely to proceed to abscess formation. The staphylococcus albus, while second in frequency, causes perhaps the mildest case of mastitis, causing mothers as a rule little more discomfort than badly engorged breasts. As a matter of fact, staphylococcus albus is found in the milk ducts of 50 per cent of normally lactating women, and causes trouble only when stasis and trauma are added factors. The streptococcus hemolyticus is much rarer, with a local reaction of mild degree that seldom leads to abscess formation, but which frequently results in violent systemic reactions. The occasional death reported in the literature from mastitis has been due to infection with this organism. There have been, incidentally, no cases reported of maternal death from mastitis alone since the advent of the sulfonamides.

In our third category of causative factors are mainly incidents related to lactation and nursing. The first of these is stasis, which was well illustrated by the war work of Klahn in Germany,[9] who divided a series of patients into two groups. In the first group infants were nursed in the usual manner resulting in more or less incomplete emptying of the breasts. In the other group, breasts were emptied routinely, and

as completely as possible, by breast pump at each normal feeding period. The first group had an incidence of mastitis twice as high as the second. Such a phenomenon is easily comprehensible when one compares it with the role of residual urine in the etiology of cystitis. Factors contributing to stasis are long feeding intervals, superabundant secretion, blocking of the ducts due to improperly supported breasts, and decreased nursing due to prematurity of maternal pain in nursing. It should be noted that so-called caked breasts do not constitute engorgement. The caking, as shown by Hicken and Taylor,[7] is due not to luminal distention, but to edema of the acinar cells caused by venous and lymphatic engorgement. The danger, therefore, is not that the involved portion of the breast will become infected, but that pain and soreness will prevent the mother from allowing the infant completely to empty uninvolved segments of the breast, which makes them less resistant to infection. Hence attention should be directed toward complete emptying of the unaffected portion, whereupon the so-called caking will relieve itself promptly.

Secondly, in this category, fissures and cracks should be considered. They are dangerous from two standpoints: the pain caused by their presence leads to maternal limitation of nursing and hence stasis, and they offer an excellent avenue of ingress for bacteria. Heaton,[6] Moon and Gilbert,[12] Hicken, and Carter,[1] all believe fissures play a large part in causing mastitis, and this belief is well supported in our own series. Sixty-four, or 81 per cent, of our patients complained of moderate to severe pain upon nursing —a presumptive evidence of fissure—from 24 to 72 hours before developing actual mastitis. In 51 patients, or 64 per cent, the presence of actual fissures was mentioned in either the doctor's or nurse's notes about the same length of time before actual infection was demonstrated. Such evidence is suggestive only, in that cause and effect are reversed. More significant is the fact that 1,018 of the mothers in our series were noted to have developed fissures, 51 (or 5 per cent) of which proceeded to mastitis; while in the remaining 6,435 only 28 (or 0.44 per cent) were affected.

Trauma of suckling would seem to be an added factor in that it forces bacteria into the injured tissues, and at the same time adds more tissue damage. Some workers feel that instrumental and operative deliveries increased the incidence of mastitis. They reason from indirect evidence based on the facts that trauma in a potentially contaminated field may cause bacteremia, and that hematogenous mastitis is a reality, as shown by cases occurring in such diseases as typhus and dysentery. However, no statistics are offered to support either of these theses.

To sum up the etiologic factors, it may be said that they embrace many conditions which, according to data from the Scotch clinic again, are most likely to occur in combination when there is increased effort by the infant to obtain a sufficient meal at either the initiation or cessation of lactation, or with break in hospital technique accompanying the discharge of the patient from the hospital to the home.

From the pathologic standpoint there are two distinct types of mastitis, either of which converges into the typical clinical picture in 24 to 48 hours: the interstitial or superficial type, and the deep or glandular. In the former, streptococcal infection is most often a factor. The infection occurs through previously existent fissures involving the superficial lymphatics, yielding first an erythema, and later induration, as the process involves the deeper glandular structures themselves. Abscess formation is relatively rare. The latter type is dependent upon stasis for development, the glandular structures being involved first, leading to induration followed by erythema as the infection spreads from the glandular tissue proper to the surrounding lymphatics. As has been pointed out by Spindler and Dowdy,[5] the majority of abscesses develop in mastitis of this variety. It is evident that although the two types are usually indistinguishable 24 to 48 hours after onset, the differentiation is somewhat important from a standpoint of prognosis.

PATHOLOGICAL PHYSIOLOGY

Before discussing treatment, it might be well to review the pathological physiology of mastitis in order to have a better rationale on which to base therapy. Initial suckling by the infant often causes edema and petechial hemorrhages in nipple epithelium which is already thinned by hormonal changes of late pregnancy. Further suckling results in erosion with actual fissure formation. There are then two factors at work leading to trouble: (1) Maternal pain caused by the fissure often causes the mother to limit the completeness of nursing, thus producing stasis within the breast, while (2) further nursing tends to force bacteria into the injured and susceptible breast tissue. Depending on the predominant element, interstitial or glandular mastitis may develop. Either type tends to spread into the combined type. Then, depending on (1) the predominant organism, (2) initial type, as mentioned above, (3) type of treatment, and (4) the promptness of its institution, the process will either (1) resolve, (2) proceed to abscess formation, or (3) result in a metastatic bacteremia.

The clinical course of the disease is so familiar that only a few points need be mentioned. The onset of symptoms and signs of the disease vary. In the Johns Hopkins series [2] symptoms have been noted as early as the second postpartum day, and as late as sixteen and a half months after delivery. However, according to the consensus of opinion, the onset is unlikely before the fifth day or after the twenty-second, with the highest incidence on the sixteenth postpartum day, which gives the typical inverted U-shaped curve on a chart. The University of California series, because of its size, exhibits a slightly more erratic curve. It shows occurrence from the first to the fifteenth day with a well marked peak on the seventh day postpartum. The only other point of interest in the clinical course of the disease is that marked systemic reaction is seen occasionally, with leukocyte counts as high as 31,000 and fevers of 105 to 106 degrees F. It is not unusual in these cases that breast

symptoms are minimal, so the disease entity should not be excluded from a differential diagnosis of a very ill patient on the basis that the breast findings are too insignificant to explain the marked constitutional reaction.

As in all disease, the best treatment of mastitis is prevention. Therefore, the first interest in the patient from this point of view should come in the prenatal period. Any defects, such as inversion of the nipples, should be corrected, and toughening the nipples for the task that lies ahead should be considered. All clinics agree to this, but there are many opinions as to the relative values of stilbesterol, massaging, ointments, and alcohol baths in effecting the desired result, and, as far as the author can determine, no statistics are available for study. At present, in the University of California Hospital we are prescribing stilbesterol ointment during the last six weeks of pregnancy for inverted nipples, and routine soap and water cleansing followed by alcohol baths for toughening the nipples.

Secondly, we must consider prophylaxis during actual nursing. This is primarily a matter of cleanliness and relative sterility which is effected by covering the nipples with sterile gauze between feedings and rinsing with sterile water before and after nursing. Other important considerations are directed toward prevention of fissure formation, and the methods are nearly as legion as the opinions are varied, with no very reliable research having been published on the relative efficacy of any. There are those who like alcohol baths for the nipples during the nursing period to toughen them and act as a mild antiseptic. The antagonists retort this only leads to brittle epithelium with additional fissure formation. These objectors to alcohol usually prefer various greasy ointments on the basis that they make the nipples more pliable and hence reduce the incidence of fissures. The majority of these ointments have as many disadvantages as the alcohol method, in addition to which they make excellent bacterial carriers. On culturing a sample of benzoin that had previously been applied routinely to breast dressings, the author obtained 107 colonies of varied micro-organisms, predominantly staphylococci.

Recently a cream has been developed that apparently embodies the antiseptic qualities of alcohol with the softening effect of ointments, and therefore should be ideal. This is 0.1 per cent 5-amino-acridine in a water soluble, absorbable base of 20 per cent carbowax and 80 per cent tween-sixty. The chemical itself shows its highest degree of activity against those organisms that most commonly cause mastitis. The base is absorbable, lending pliability to the nipple without the greasiness of other ointments; and, being water soluble, it is easily removed before the baby is put to breast.

On our own obstetrical service at present, before nursing the mother's nipples are rinsed with 70 per cent alcohol, followed by sterile water. After nursing, the nipples are rinsed with water only and covered with plain sterile gauze, which is then impregnated with amino acridine. Since the discontinuance of routine tincture benzoin nipple care, there has been an obvious decrease in fissure formation and nothing resembling acute mastitis.

Our third consideration is the treatment of choice in case fissures develop. As was noted in previously quoted reports, fissures are present in most patients for at least 24 hours before mastitis develops, and in the great majority of cases for a longer time. Data on cases at the University of California Hospital shows that 15.6 per cent of acute mastitis developed in less than 48 hours after fissure formation and 84.4 per cent in more than 48 hours after fissure formation. It is evident that the curve of lag between fissure formation and of actual infection remains relatively flat for approximately 48 hours, after which it rises steeply. Thus, it would seem reasonable that efforts to cure fissures should be made for 48 hours, after which the danger of mastitis should be considered too great to temporize. Nursing, therefore, should be abandoned at the end of this period and lactation discontinued.

Our policy when demonstrable fissures develop is to use glass nipple shields for 24 hours. If no improvement occurs, the infant is taken completely off breast for another 24 hours. If that does not result in marked improvement, the child is removed from breast entirely and the mother's breasts dried.

Acute puerperal mastitis occasionally develops despite efforts to forestall it, and intensive treatment then must be undertaken. Moon and Gilbert[12] in London have shown that for the infant's health it is necessary to remove the baby from breast if there is reasonable suspicion of mastitis. In their series in which the mothers nursed during the early phases of acute mastitis, infant morbidity from enteritis alone was 8 per cent and mortality 3 per cent. As to the mother, the breasts should be dried immediately to decrease stasis, volume of tissue, and functional activity, all of which tend to accentuate and perpetuate the infectious process. There seems to be little choice as to whether stilbesterol or testosterone is used for this purpose, although such enthusiasts as Soloman claim that testosterone results in more rapid action with a minimum of secondary filling. Snug binding is advocated, of course, with ice bags to serve the threefold purpose of decreasing pain, decreasing blood flow, and thus decreasing milk formation.

MEANS OF THERAPY

Therapy consists in the main of treatment with: (1) sulfonamides, (2) penicillin, and (3) x-ray. The sulfonamides were most disappointing in treating mastitis, notably because of the staphylococcus in the majority of breast infections. In addition they are almost totally worthless in the presence of abscess formation because of the large amounts of para-amino-benzoic acid present in such circumstances. The only time sulfonamides may be of value is very early in the infectious process and in full dosage.

Penicillin is not ideal, but is of excellent value in staphylococcus infections in contradistinction to the sulfonamides. However, it will seldom replace incision and drainage once an abscess has formed.

Its value is twofold: it gives a very high percentage of cures in early cases that have not progressed beyond the cellulitis stage, and it is useful in preventing the spread of the process once an abscess has actually formed. It must be remembered that it is important to use adequate dosage to get the infection under control as rapidly as possible, as staphylococcus aureus shows an amazing propensity to become penicillin-fast.

The most voluminous and enthusiastic reports of success in treating acute mastitis come from the roentgenologists. Treatment with radiation has been in vogue in Germany for some time, but the first American reports of interest date from 1940. The average technique is an exposure of 40-100 r in air each day for five days, the case being discarded as a failure if definite improvement does not occur in 48 hours. The physiological changes are reported to be a hyperemia with leukocytic attraction and leukocytic lysis, resulting in escape of abundant bacteriolysins, with an acceleration of the whole defensive metabolic process. The advantages that McIntosh, et al.,[10,11] report are that there is pronounced alleviation of pain almost immediately, the length of the illness is notably reduced, the percentage of abscess formation and the recurrence rate are decreased, and the cost as compared with that of chemotherapy and antibiotics is less. If abscess formation does occur, therapy is either by incision and drainage, or by aspiration and injection of penicillin.

To sum up the results obtained with various methods of treatment: The sulfonamides are least effective. In Nelson's series of 12 patients treated with sulfonamides, incision and drainage ultimately was necessary in nine cases with an average morbidity of 50 days. In McIntosh's series[10] (used for comparison with her series in which treatment was by radiation) abscess formation was reported in 18.7 per cent. Spindler and Dowdy[5] also have a series for comparison with the series in which irradiation was used, comprising 65 cases, in 30 per cent of which abscesses developed and average morbidity was 50.3 days. At the University of California Hospital in the past ten years 20 cases have been treated with the sulfonamides, and in only one (5 per cent) did an abscess develop. In all the series reviewed, the combined average of abscess formation in patients treated with sulfonamides was 44.7 per cent.

In Hodgekinson and Nelson's series[8] of 33 patients treated with penicillin, four (12.1 per cent) developed abscesses. In the 13 cases in the University of California Hospital in which penicillin therapy was used for acute puerperal mastitis, none developed this complication, giving a combined average of 8.7 per cent in which there was abscess formation.

The combined results of series reported by roentgenologists show that of 137 cases of acute puerperal mastitis treated with radiation, there was abscess formation in only four (3 per cent). We have treated no patients with radiation, hence have no basis for comparison.

Analysis of the combined results from the point of view of the relative importance of time lag between onset and the beginning of treatment, discloses that in the group treated with sulfonamides the time lag made less difference than it did in the groups treated with penicillin or radiation. In 27 patients treated in less than 24 hours after onset of symptoms, seven (22.4 per cent) developed abscesses, whereas abscesses developed in 13 (34 per cent) of 38 patients treated later than 24 hours after onset of symptoms—as would be expected from what we have previously learned about sulfonamides. In the series in which penicillin was used, time lag was more costly. Of 24 patients in which treatment was commenced in less than 24 hours none developed abscesses, whereas of ten treated later than 24 hours after onset, four (40 per cent) had this undesirable outcome. In the series in which radiation was used, abscesses developed in only two (1.9 per cent) of 103 patients on whom treatment was started within 24 hours of the onset of symptoms, while there were abscesses in two (5.8 per cent) of 30 patients not treated until after elapse of that interval. Hence it would seem that penicillin and radiation give similarly beneficial results, with penicillin the therapy of choice in the first 24 hours, following which it may be well to supplement that drug with x-ray.

As to treatment of abscesses that do develop, the only series of comparative data available is one reported by Fraser.[3] In that series, aspiration and penicillin injection were performed daily until cure was effected. The series comprised only 15 patients and the results were somewhat disappointing in that only three were cured by this therapy; in seven there was spontaneous drainage through the site of repeated puncture, and in five cases incision and drainage finally became necessary. Despite this, however, penicillin injection still seems to be the treatment of choice, for the morbidity was 19.6 days in those cases in which there was incision and drainage, as compared with 5.3 days for those cases in which drainage was spontaneous. Patients in whom the disease was resolved without drainage were well in four days.

In summary then, we may say that acute puerperal mastitis is a disease entity caused by the simultaneous occurrence of a pathogenic organism and disturbed factors of lactation in a predisposed individual. Once it has developed, a factor of paramount importance in treating the disease is early institution of therapy. The best therapy at present seems to be penicillin supplemented, if treatment is unfortunately begun late, by radiation therapy.

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Emotional Factors in Obstetrical Practice

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THE experience of the war years in the study of the psychiatric casualty has added materially to our knowledge of neuroses and neurotic symptomatology. Even more important is the tremendous stimulation of interest in this field among non-psychiatrically trained medical men and the general public. Medical men have long recognized the need for a more practical application of psychotherapeutics, but have been handicapped by certain prejudices, poor ground work in their formal medical education in psychiatry, and the fact that the time and study now needed to prepare themselves is a formidable problem in the life of a busy physician. The interest of the general public is important in that the lay mind slowly is coming to recognize that psychosomatic illness is no more a stigma than any other illness and that the need for psychotherapy does not indicate that the patient has a psychosis. There is still much to be accomplished in this direction, however, for all too frequently we see both patient and family deeply offended by the suggestion that the difficulties of the patient are related to an emotional factor for which neither medicine nor surgery is indicated, but rather treatment by a competent psychotherapeutist.

The prejudices of medical men against the findings of the psychologists, especially the psychoanalytically trained psychiatrists, stem, in my opinion, from three sources:

1. The researches of Freud and of the many people who have confirmed and further developed his work create for us a picture of the human mind so bizarre and grotesque that it is with difficulty that the average individual can do other than ridicule their findings. We so wish to be rational or to appear to be rational that we ignore the fantastic workings of our minds as they are revealed, for example, in the dream that leaves us shivering with astonishment at our own depravity. But as the student of higher mathematics learns that two times two does not have to be four, so prolonged researches into the dynamics of human emotion demonstrate conclusively that, for example, one can both love and hate the same individual (and frequently does); that a woman may exhibit the most profound maternal instinct yet unknowingly have such a strong aversion to childbearing that pregnancy makes her dangerously ill.

2. These prejudices against what seem to be such fantastic and improbable concepts are augmented by the fact that the psychologist is a realist, not a moralist, in his appreciation of human instincts and drives. He sees the individual as a human being driven inexorably toward certain goals but constantly forced to compromise his true needs to the realities and restrictions of the particular culture in which he lives. Thus, in the person imbued with a deep religious morality, psychoanalytical concepts may create conflict and antagonism.

3. Few of us are perfectly adjusted personalities; we all have neurotic trends of greater or less degree, and when faced with a concept that makes us recognize an irrationality in ourselves, as well as in the patient, we turn away from it uneasy and offended. The preservation of our own egos too often takes precedence.

Despite the fact that there is still much honest skepticism about the value and practicality of this field of medical art, there is a steadily increasing growth in discussion groups and the presentation of studies on the subject of psychosomatic medicine, and many of us believe that this is one of the most important advances in medical practice. To participate in this advance it is necessary that we devote considerable time to study and discussion; that we be able to give more time to each patient; and above all, if we are to be even moderately successful, that we have a *real* and not a *pseudo* interest in the patient as a human being. This ability to feel for and with the patient, to identify ourselves with the patient as

Read before the Section of Obstetrics and Gynecology at the 76th Annual Session of the California Medical Association, April 30-May 3, 1947, Los Angeles.

it were, comes easily to some and with difficulty to others, but should be developed as one of the physician's most valuable assets.

The majority of neurotic symptoms stem from anxiety. The diarrhea, tachycardia, faintness and pallor experienced before or during stress or danger are typical psychosomatic symptoms the cause of which is quite manifest to the patient. If we accept the well established fact that we may have anxiety due to subconscious conflicts and fears, we have a working hypothesis for the study of our patient. The subconscious has varying degrees of depth—strata, as it were. The deeper the layer in which a conflict is buried, the more difficult its unearthing. The psychotherapist who cannot give full time to this aspect must be content to dig in the upper layers only. When the trouble is accessible, we can help; when it is too deeply buried, only prolonged analysis can benefit the patient. But the superficial, pre-conscious, accessible layers yield helpful material so often that it is very much worth our while to make an attempt at unearthing it. This short technique requires that we know the most common conflicts experienced by our patients, and the possible effects of these conflicts, and that we have the ability to help the patient to reveal her problem, not so much to us as to herself, so that it may be faced and resolved and no longer suppressed.

It is my purpose in this paper to attempt to stimulate further interest in this, to me, fascinating field by discussion of two cases typical of many in which psychotherapy was practical and successful for the non-psychiatrically trained obstetrician, and to call attention to some of the many emotional trauma we as physicians too often impose upon our patients.

Example 1. Mrs. A. lives in a small apartment because no other housing can be obtained. She has had two children in rapid succession, the younger being six months old. She is again pregnant. With no history of nausea in previous pregnancies she now has exaggerated vomiting. She and her husband feel that she must have an abortion but at the abortionist's office their feelings change and they leave without completing their mission. Mrs. A. assures me that she is now completely reconciled to her pregnancy but she continues to vomit and there is no response to treatment. When asked if she is really reconciled to her pregnancy or putting on an act, she finally admits that it is an act and that she still feels bitterly the injustice of being asked to go through another pregnancy so soon and under such adverse housing conditions.

Question: "But why are your housing conditions so important? And does anyone live with you?"

Answer: "My mother lives with us."

Q.: "What is your relationship to your mother?"

A.: "Oh, very good."

Q.: "What does she say about your pregnancy?"

A.: "She says she did it so why shouldn't I."

Q.: "Now, Mrs. A., we are good friends and this is one place where you can really say what you think and how you feel. Suppose you stop pretending to like a pregnancy which causes you so much distress, and also, perhaps for the first time in your life, say what you really feel about your mother."

After long hesitation she burst forth in resentment against her pregnancy but more especially in a flood of pent-up hostility against her mother. When assured that many girls hate their mothers and that she need feel no guilt about expressing her hostility, she drew a picture of a selfish and egocentric mother like the typical "Mom" of Wylie and Strecker. I explained to her that her nausea resulted from her attempt to suppress her hostilities and that from now on she should blow her top in my office as often as she felt like it. She did not vomit again after this visit.

The important points in this case are the suppression or attempt at suppression of the patient's feelings about her pregnancy and, even more important, the suppression of extreme hostility toward her mother, hatred of a parent being to her a terrible sin which she could not admit to in consciousness. Many people hate a parent but few dare recognize their hatred. Does not the Bible say, "Honor thy father and thy mother that thy days may be long"? It goes even further: "Love thine enemies."

EXAMPLE 2

Example 2. Mrs. B., whose husband has been in the South Pacific for two years complained of vaginal discharge, itching and burning, irregular bleeding, pelvic distress, headache, insomnia and loss of appetite. Her past history was negative, pelvis normal with moderate mucus discharge. The patient revealed a strong sexual drive, erotic dreams, sexual excitement when in the company of men who attracted her. She had foregone all social life in mixed company "for fear she might be tempted to be unfaithful to her husband." Under direct questioning she admitted with embarrassment and reluctance that she masturbated. When assured that her sexual drive and impulse toward its satisfaction were normal, in fact more normal than their absence would be, and that masturbation is resorted to by many normal adults when deprived of their usual sexual life, that it does not constitute a perversion in those circumstances and would not result in injury to her mentally or physically if she ceased feeling guilty about it, she appeared visibly relieved and left the office with a new approach toward the months to come before the return of her husband. A month later she was completely well without other treatment than the first and second interview.

The guilt feelings and resulting anxiety in this woman obviously made her ill. The important point in this case to me is the misconception on the part of the patient of what constitutes a normal instinctual drive and what constitutes a perversion. It is not within the province of this essay to discuss this subject. The point that I wish to make is that we as obstetricians and gynecologists come, I believe, closer to the hearts of our patients than almost any other group of physicians. We have not only the opportunity but we have the obligation to study our

patients' emotional as well as their physical problems. This obligation requires us to train ourselves in psychotherapeutic techniques, to take the time with our patients necessary for the application of these techniques, and, above all, to learn to know ourselves, for only he who has insight into his own emotional life can hope to help in the emotional lives of others.

It is astonishing, as we dig around in the superficial strata of the patient's emotional life, how many anxieties we find for which we as physicians must assume the responsibility. Granted that human beings should ideally be well adjusted and capable of meeting reality and coping with it successfully, the fact is we seldom see such a person. No matter how beautiful the facade of equilibrium may be which a patient presents to the world, her inner life may be subjected to turmoil by relatively mild stimuli. The prevention of this instability lies no doubt in parent education, so that the adverse conditioning of infancy and childhood may be avoided and neurotic trends corrected at their source. But we must face the fact that our attitudes and actions exert tremendous influences upon our patients. Justifiably or not we are God-like or, one and the same thing, parent-like in our position of authority. Thus, in analyzing the anxious obstetrical patient we find that in a surprising number of instances she has been told in late adolescence or early adult life, by her physician, that her uterus is retroverted or that it is infantile in development. Going further he has told her that she may never become pregnant; that if she does, she will in all probability abort; and that if she should by chance carry a pregnancy to term, she will require a cesarean section. As a result of the anxiety engendered by such statements we see childless women torn between the desire to satisfy their strong maternal instinct and their fears concerning the hazards of childbearing; or we see a woman who has accidentally or courageously become pregnant, miserable throughout her prenatal period, questioning every subjective and objective symptom, nauseated, sleepless and irritable. The Rh factor should he mentioned as the latest bogey man tossed at the Rh negative patient without the necessary reassurances and explanations that can be given her to offset the grim picture drawn by the lay magazines.

What do our statements to the patient connote to her as a result of her cultural and environmental conditioning, or to chance-acquired information? This question must always be in our minds. The diagnosis of a breech presentation may mean nothing to her or may mean possible disaster. She may have known someone who lost a baby by breech delivery. She may have known of death following cesarean section and as a result her postoperative course, if she has a section, may be stormy due wholly to fear. We may have difficulty hearing the fetal heart, but fail to reassure the patient, with resulting anxiety and illness if, for a time, the fetal movements are imperceptible or weak. In our desire always to have an answer for the patient we may blame miscarriage on over-activity, lifting or intercourse. Granted we may be right, let us consider the woman who has tried for years to become pregnant, finally does so with resulting happiness and great anticipation. She miscarries after intercourse. That solves our problem of explaining the cause, but the resulting guilt feelings of the patient may produce a secondary frigidity, and why not? How can she again satisfy her instinctual needs while associating the act with her miscarriage.

It would be futile to attempt to cite more than a few of innumerable possibilities of trauma to the patient's emotional life resulting from our lack of alertness and sympathetic understanding.

We get tired of other peoples' maladjustments, their inability to understand what seems to us so obvious, in fact their seemingly perverse insistence on misunderstanding and misinterpreting our explanations. Coping with the other fellow's problems depletes our own emotional and physical reserves, and at times it seems too much to ask of us. But the rewards are great and satisfying for the patient and her physician.

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The Choreiform Syndrome; Its Significance in Children's Behavior Problems

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MODERN American child guidance philosophy has been characterized by emphasis on the importance of environmental influence as conveyed through relationships to persons in the environment —parents, siblings, teachers, and others. Emotional attitudes of both the child and his adults and the interplay between them resulting therefrom are rightly considered as important causative factors in any problem situation. Training, experience, habits, and attitudes to parents come in for their share of significance and correctly so. Many of these things are not new, of course, to the experienced pediatrician and family doctor. He has for many years straightened out problems through common-sense and intuitive understanding of the factors involved without the use of any nomenclature or formalized procedure. But even so, there are a great many problems in which the "child guider" can and does contribute something through his knowledge of the hidden, the unconscious, the not readily discernible mental mechanisms. Many successful readjustments in children have been brought about by both pediatrician and psychiatrist, singly or in cooperation. The more comprehensive approach of the Child Guidance Clinic "team" no doubt added greatly to this number of successful readjustments.

From time immemorial all transgressions of both children and adults have been met by punishment. Unacceptable behavior in children was to be punished out of them; fear of future punishment was to act as a deterrent. The same was and is still true for adult criminal behavior and was true in the case of mental illness in a not so distant past. It is for only little over a century that insanity has been regarded as illness. And it is considerably less than a century that anyone has opined that delinquent and criminal behavior might possibly be expressions of disordered functioning of the individual.

With the rapid growth of scientific medicine and physiological insight in the last 50 years or so, delinquents and criminals have been studied from the standpoint of illness both physical and mental. But it soon became apparent that the ordinary nosological categories of disease did not fit. Many delinquents were not sick, not feebleminded, not insane. True, one always "had an alibi" in "constitutional psychopathic inferiority" or in "psychopathic personality" or in "criminal character." But these are only some additional descriptive terms, not etiological concepts.

A deeper understanding of disturbances of behavior came with the psychoanalytic school of thought and, in the case of children and their delinquencies, with the work of such men as Healy and Aichhorn. Our discussion in this essay of physiological factors in no way contradicts the mental and psychobiological mechanisms, described by these men, mechanisms which have been and always will be fundamental, valid and truly etiological. However, we wish to call attention to some physiological facts that have been largely overlooked in the past but are becoming more and more discernible on closer analysis and in the light of more recent knowledge of brain functioning, and to indicate how they directly influence behavior.

The best and clearest example of how actual physical disease of the brain can lead to behavior changes in the direction of delinquency is found in the case of epidemic encephalitis and its sequellae. These changes have been described by many writers since the early 1920's or soon after the great epidemic of encephalitis. The most notable work in this country with such behavior problems has been the Philadelphia project as conceived and reported by Bond, Partridge and Appel.[1,2] Their experiences and descriptions coincide with practically all other reports both here and abroad. At the core of the behavior disturbance is a hyperactivity, a restlessness, and outwardly directed aggression of such intensity as to be uncontrollable by the individual who sometimes merely stands by, as it were, and sees himself act as described. These children often intelligently describe an impulsion or compulsion over which they have no control: "Gee, doc, I don't know how I done it and I'm sorry afterwards!" Eugen Kahn[3] calls this condition an "organic drivenness" — a very apt characterization.

Other associated symptoms are often found in these cases, such as sleep reversals and metabolic changes. These help in the localization of the organic disease, but the essence of the abnormal behavior lies in *hyperkinesis* and *aggression*. It has also been pointed out that the balance between instinctual drives and repressive forces has been tipped toward the former, making possible a freer display of aggression. It may well be (and here we are bringing in psychosomatic or somatopsychic essences) that the curbing of instinct through training is possible only in the presence of organic integrity of definite neurone patterns, an integrity susceptible to disturbance or destruction by inflammation or trauma. So it would seem from study of the cases on which this discussion is based.

ORGANIC DAMAGE

Since 1930 more than 3,000 school behavior problems have passed through the author's hands. Seven hundred of these have been the problems of adoles-

Chairman's address, read before the Section on Neuropsychiatry at the 76th Annual Session of the California Medical Association, April 30-May 3, 1947, Los Angeles.

cent delinquents or pre-delinquents. Well over half the cases in the entire series, when thoroughly investigated, have shown evidences of an organic core of disease. From the standpoint of the classroom teacher of the lower grades, the greatest problem is the hyperactive child*; in the series of the adolescents, the graver problems and the repeaters show evidences of organic damage in 75 per cent. Extremely few of these children (0.1 per cent) have had epidemic encephalitis, *but the similarity of the syndrome to that of postencephalitic behavior is striking and the difference is only in degree.* Our attention was first drawn to this similarity by the manifest nervous instability as seen in hyperkinetic motor phenomena, such as choreiform restlessness and jerkiness, which usually accompanied the hyperactive behavior. We have come to label this instability, for purposes of brevity and uniformity, the Choreiform Syndrome. Analysis of the history always reveals some traumatization of the central nervous system, either by inflammation or injury.

* These are, *verbatim*, the teachers' comments with which children are referred for study. They were chosen from one month's referrals.

"Very talkative. Cries out at night. Restless sleep. Enuresis. Concentration poor. Short span of attention. Does not work well in school. Never finishes work unless forced to do it. Does not play with other children if he can get out of it. Frequently gets into trouble on the yard. Loses temper."

"Showing off—noisy—disobedient and rude. Concentration lasts about two minutes. Stamps feet when entering room and shouts. When reading a lesson he may sing or whistle or jump around and dance. On the playground he runs aimlessly and will not play with the other boys."

"Extreme nervousness. Does not get along well with other children. Very nervous. Unable to sit still any length of time. Period of concentration very short. Easily overstimulated when with other children. He tries to cooperate but seems unable to control himself."

"Emotionally unstable—hyperactive—fatigues quickly—short attention span. Talks out loud in the room and in the rest class tosses about on the cot and is noisy. (One doctor said, 'All he needs is more activity.')"

"Extremely hyperactive boy—fatigues easily—school history since B1 is hyperactivity. Short interest and attention span. Mother recognizes this and wishes help. He is becoming a neighborhood problem too in that he isn't dependable—has gotten into vacated buildings. Very immature socially and emotionally—can't sit still very long. Mumbles and hums to self all day long. Slides off chair onto floor—crawls around under tables, etc. Accomplishes nothing—likeable boy as one gets to understand him. Not malicious nor smarty—just queer mannerisms."

"Inability to pay attention in classroom. Wiggles all the time. Jerks spasmodically. Always touching and disturbing other children. Does not get along with them."

"A serious behavior problem. Does not respond to any corrective measures. Mother suggests spanking. We doubt if it will be the right approach. His teacher has tried innumerable ways to have Robert become member of group but does not feel he has made any improvement. Insists on playing during rest period. Rolls around on cot, sticks feet up in air. In the room throws beads, whistles, hits other children unprovoked, calls them names. Plays and will not work. Makes queer noises. Laughs and thinks it is funny when he has conference with teacher. This behavior is of hourly occurrence each day."

"Hyperactive, nervous, short attention span. Greatly lacking in self confidence. Smarty. Wiggles on chair—talks, moves around without apparent aim or motive. Throws things and fights. Hits others without provocation. Must be made to complete work."

"She is extremely nervous and not able to concentrate on anything. Also she is not able to play with other children. Socially maladjusted. She is extremely flighty and her attention span is very short. She is a social problem on the yard for she is very resentful and cannot play with other children. She is also apt to push and hit."

"Excess nervousness. Talking and running around. Unwillingness to do any assigned work. Inattentive in class. Boy is very immature and often seems tired. Does not like organized play."

The crowning one came in recently: "Perpetual motion, both purposeless and mischievous."

SEQUENCE OF EVENTS IN BEHAVIOR PROBLEMS

The following sequence of events appears with such regularity that it cannot be ignored and may indeed be considered a typical case:

1. Of what we consider etiological significance we find forceps birth, very precipitate or prolonged difficult labor; malnutrition or severe febrile disease during the first year; "fall on the head" during infancy or childhood; high fever and/or delirium associated with any of the acute exanthemata; undiagnosed or unexplained fevers of varying duration; middle ear infection with or without mastoiditis.

2. Change in personality and behavior in the direction of "nervousness" and hyperactivity (a) soon thereafter or (b) with the onset of puberty (Healy [4] has noticed and commented upon this last point). This change may also first become manifest when the child enters school; the stimulation and distraction of the group apparently bring out a latent behavior disturbance; complaints begin to pour in: restlessness, lack of concentration (won't or can't?), aggressive behavior towards other children, etc.

3. Progressive failure and maladjustment to school. With an average or better than average I.Q. as measured by Binet, these children show two or more years' retardation in school achievement. Many of them have a relative reading disability and earn better grades in arithmetic and manual activities. Continued pressure by parents and teachers to achieve and succeed merely intensifies the conflict and resulting maladjustment. Continued failure plus a physical restlessness and distractibility make school a place of torture. Or hopeless competition with a superior sibling brings about the same result.

4. At this point the behavior course may diverge in the direction of delinquency. Truancy enters the picture and brings with it rebellion and conflict. Truancy brings active "retaliation" from the powers that be: truant officers, disappointed parents, probation officers. If the boy has any sort of "spunk" he fights back and a delinquent is in the making. An unbelievable amount of delinquency originates in truancy and the problems centered about it.

5. Results: If correction is not achieved at this point, behavior becomes more and more antisocial.

Compensatory behavior ensues and leads to adventure in such things as car-stealing and gang-depredations. In less gregarious youngsters, more devious and secretive ways of obtaining satisfaction are seen: lone-wolf stealing, burglarizing, vandalism. Also at this point may the form of deliquent behavior be determined neurotically; certain symbolic and disguised sexual and aggressive behavior may come to the fore. Many of the contributions of the psychoanalytic school of thought are based on this particular segment of delinquent behavior. But it is a small segment, valid though the mechanisms described are, and does not begin to encompass statistically the great numbers of delinquents with whom we have to deal daily. The child may be carried through the above sequence in the manner described; when the delinquent level is reached, behavior takes on the form prescribed by his unconscious conflicts, usually the death-wish directed either outward or inward or both. The damaged and mal-conditioned mechanism makes possible the release of antisocial instinctual drives at a time when the individual is already in open conflict with his environment on the conscious level for consciously perceived reasons.

As a rule, these children have a normal or better I.Q., and they look healthy. The ordinary physical and even neurological examination produces nothing of importance. So, not being *dumb* and not being *sick*, these children are *bad* and this appraisal follows them through the years, gathering momentum. A certain number of cases (smaller than we used to think) are explainable by more purely psychological or dynamical concepts—fixations, indulgence, neglect, faulty habit training, etc. But, as already has been stated, even these mechanisms may need an "organic" release, or at least operate along with the physiological factors. Too often do we see the physiologically damaged one of a group of siblings turn out to be the black sheep; he has been exposed to very similar experiences but has been unable to make a similar adjustment because of a damaged "machinery of adjustment." It is only when one is alive to the more subtle neurological changes—hyperkinesis, choreiform restlessness, fine tremor, too lively reflexes, ortho- and parasympathetic signs, metabolic disorders of varying degree—and along with these can consider and correlate the type of behavior—hyperactivity, distractibility, aggressive attack—that one begins to see the postencephalitic or posttraumatic core of the symptom complex. Now, as stated before, it is not claimed that all these children have had encephalitis and have developed clinical postencephalitic changes as a result. But what appears to be true is that the ordinary acute exanthemata of childhood are too often complicated by encephalitic invasion of the central nervous system (high fever and delirium are the indicators in our experience) and thus influence later behavior in a manner similar to epidemic encephalitis. The difference is only in degree; the cardinal signs of *hyperkinesis* and *diminished inhibitions* are the same. Here we must include other infections, especially of the middle ear and mastoid, as well as the various head traumata. Posttraumatic and postencephalitic behavior are in general the same.

PLACE OF SCHOOL IN DELINQUENCY PATTERN

The behavior course toward delinquency, as previously traced, leads through school difficulty and conflict. This must not be construed as meaning that all delinquency arises from school difficulties. The fact that the first steer in the direction of delinquency so frequently occurs in relation to school experiences is due to the following: (1) school is a universal childhood experience; (2) school is the first testing-ground of the child's adaptive capacities to society-at-large (as contrasted to the smaller family circle) under conditions of (a) imposed prohibitions or control and (b) competition with peers. These two demands, (a) and (b), are real tests of the social-adaptive mechanism and soon bring to light any flaws in it, whether built-in by faulty training in the family *milieu* or caused by organic damage to the machinery of adaptation—the central nervous system. In the organically undamaged child, mal-conditioned behavior can more easily be reconditioned by proper training, by normal growth and maturation, and by the inherent self-preservative drive when it can function without organic handicap. But when the actual "machinery" of adaptation to social restrictions and demands has been damaged by inflammation or trauma, reconditioning and training are not so easy and frequently fail. Then is when rebellions against control, satisfactions to compensate feelings of inferiority, escapes from intolerable situations, etc., lead to "delinquent" behavior. It is this failure of adaptation to social requirements that breeds delinquency and may foreshadow later criminal behavior.

Flaws in the adaptive mechanism. One can be more specific in defining these flaws, in the light of observation of school children through the years of their school career. Many children in the primary grades, who show (1) hyperactivity and uncontrollability, (2) distractibility and short attention span, (3) reading disability or low achievement scores in spite of a high I.Q. (probably due to (2)), (4) hyperexcitability chiefly when in a group of children, and (5) aggressive actions against other children, later turn up in the "welfare center" of the city schools as pre-delinquents or delinquents. Complaints by teachers begin to come in even when a child is in kindergarten: noisiness, running, pinching, shoving, disrupting games. Later there is difficulty in learning to read; arithmetic scores may be better but both reading and arithmetic achievement may be low, in the face of a relatively high I.Q. as measured by Binet. If the child can work alone with a tutor without the exciting distraction of the group, there may be some improvement in these, or there may not. Even under the kindly individual attention of a tutor, the mind wanders; a word learned today is gone tomorrow. On through the school years difficulties pile up, tension increases, rebellion grows. A younger brother or sister may be a grade or two ahead. Parental disapproval and rejection are felt

even though verbally not expressed. The result is our full-blown delinquent or pre-delinquent.

As to flaws in the adaptive mechanism: What are the specific functions of the human mechanism, directly involved, disturbance of which leads to the kind of trouble described above and finally to delinquency via the path of school maladjustment? These are: (1) Disorders of concentration and attention; (2) Disorders of emotional control. The importance of power of concentration and of emotional control in the learning process and in group life (school to the youngster) is self-evident. Attention and concentration are fundamental to learning; control of the emotions, especially the rage-response, are essential to getting along in the group. Most school difficulties can be boiled down to disturbance in one or both of these areas.

DAMAGED MACHINERY OF ADAPTATION

No one can deny that training is of prime importance in the development of concentration and self-control. Successful training, however, depends not only upon proper training experiences, but also upon a reasonable integrity of the nervous mechanisms involved in the habit-formation we call training. It is exactly the integrity of these nervous mechanisms that is damaged in the cases upon which this paper is based. Concentrated attention and emotional control require intact cell patterns and connections. It is common experience to find these powers decreased or destroyed after a severe febrile illness or injury. The conclusion is forced upon one that the nervous connections necessary to these functions have been damaged.

The location and extent of these nervous connections and cell-patterns are not completely known. All levels of cerebral activity are probably involved. But we have reason to believe that the core of the trouble lies in the diencephalon. Emotion and emotional control are referred to the hypothalamus by numerous writers and researchers; we have only to recall the violent and sham rages of experimental hypothalamic stimulation or of invading tumors of the third ventricle in order to see the relationship. Short attention span and distractibility, however, are more difficult to connect up with the hypothalamus. These, I think, are mere differences in degree and modality of the function of awareness which in turn is related to the function of consciousness-maintenance. Ingham and others support the localization of consciousness in the hypothalamus. The extreme somnolence or extreme wakefulness in cases of encephalitis are certainly suggestive of such a localization. Probably the acme of activity of this consciousness-maintenance mechanism is seen in the function of highly concentrated attention and the ability to hold it so, shutting out distracting stimuli. Certainly, failure of this function leads to a reverse condition of scattered attention at the mercy of any stimulus or to a dropping off into sluggish somnolence.

As to control of the emotions, it is basically human to become angry when things do not go our way. In fact, the behaviorist Watson declares that the rage-to-thwarting response is one of the three unlearned emotional mechanisms with which a child comes into this world. Normally, growth and training bring this primary emotion under the control necessary to living in a group. One cannot go around "flying off the handle" whenever thwarted, and last long in society. Yet there is no doubt that the successful curbing of this primitive instinct requires the integrity of certain neural mechanisms, an essential link in the chain being located in the hypothalamus. For when the hypothalamus is electrically stimulated in cats, all the physical manifestations accompanying rage ensue —so-called sham rage; when a third ventricle tumor invades the thalamus and hypothalamus, marked automatic unprovoked rage explosions may occur. Rage attacks following insignificant stimuli have also been reported in postencephalitic cases.

While a certain degree of anger and rage is normal, it is excessive irritability or rage out of all proportion in its appropriateness or violence that concerns us here. We see children fly into rages of such extreme that the child is completely inaccessible and uncontrollable, and the attack has to "wear itself out," so to speak, much like an epileptic attack. Indeed, we feel that there is a relationship to epilepsy in such uncontrollable rages; many of these children show abnormal activity in their electroencephalograms. Thus, in a series of 79 problem cases whose outstanding symptom was temper or rage tantrums with or without adequate stimulus, six showed normal tracings, seven showed what was termed borderline dysrhythmia, and the remainder gave more pronounced findings, such as general dysrhythmia, psychomotor waves, a few slow bursts, fast wave bursts, severe dysrhythmia, and some localizing occipital, central and frontal disturbances, mostly dysrhythmia. We were unable to correlate these findings very exactly with the behavior syndrome. They are of course not conclusive, merely suggestive. And it must be noted that dysrhythmia occurs in a large proportion of the population without any clinical cerebral signs.

So here we have two basic functions essential to the process of adaptation: power of concentration and emotional control. These functions or their anatomical substratum are vulnerable to trauma and infection. Damage to them causes a real handicap to the child, far greater in the long run than many more visible and tangible handicaps. In our experience with many school behavior problems, from the kindergarten mischief-maker to the adolescent delinquent, these functions were damaged early in life in most cases and such damage contributed directly to the behavior problem.

Distractibility and lack of emotional control seem to run through many of the maladjustments of childhood and so influence all later life. Not only do they directly handicap the individual possessing them in actual performance and competition, but they also evoke unfavorable responses from those about him and thus aggravate both his condition and his maladjustment. Such children are constantly thwarted by their own poor performance and hounded by the

reactions of impatient and intolerant parents and teachers. As a result they turn to other compensations, usually undesirable behavior and mischief (here their hyperactivity drives them), or they may withdraw into themselves. Their intelligence need not be diminished, but their inability to apply themselves precludes their gaining sufficient useful knowledge or skills. Continued lack of success embitters them. Their emotional irritability and excitability can create even more misery for them, depending upon the responses aroused in others. Frequently they are beaten, deprived, ostracised for traits and behavior beyond their own power to mend. With everyone "mad at them," there is rarely anyone to lend a helping hand—so little is understood about the real nature of their difficulty. Continual rebuffs and hostility to an organically irritable, uncontrolled and destructive child—thus can delinquents be created.

WHAT CAN BE DONE ABOUT IT?

What can be done about it? Comparatively little in the older and more hardened individuals. The incidence of recidivism is high, as shown in the follow-up studies by the Gluecks on delinquents. Even Bond's group of postencephalitics, who had had ideal treatment in a hospital school, showed many breakdowns after returning to a more unsupervised and tension-producing home situation. I see many boys whom I studied in a child guidance clinic years ago and in whom I missed the significance of the above-described changes, turn up in one of my present clinics as full-blown delinquents. Critical study at the present time reproduces the picture described above.

But we can do something in a preventive way. This lies in the early recognition of these adaptive handicaps and disabilities. Such recognition must be followed, not by attempts to coerce or change the child, but by adjusting the requirements placed upon him to his capacity of performance. When it is understood by all concerned why he behaves as he does and how much improvement he is capable of, then a start in his treatment has been made. When the impossible is no longer expected of him, the tension lessens all around. Then and not until then can he begin to improve. At that point whatever physiological treatment is indicated has a chance of taking hold. Some of these hyperactive states and epileptoid rages do respond to medical treatment. Frequently the treatment of coexisting endocrine and metabolic disorders (and the hypothalamic area is a particularly fertile field for such) will modify the nervous basis of the undesirable behavior traits. Our experience with such medical treatment has been described elsewhere.[5] Once the child need no longer struggle against hostile odds on all sides, normal growth and development will also contribute their share in the "outgrowing" of the disordered neurone-hookups which underlie the disordered behavior; this we have seen time and again.

SUMMARY

In this presentation the author has tried to point out certain organic factors that enter into the formation of a majority of school behavior problems. These factors are not readily apparent but can be discovered by careful neuroendocrine examination correlated with an understanding of the behavior sequence. They are factors that are operative in spite of normal intelligence, good general health and even favorable home environment. They are in the main disturbances of concentration and attention, with a deficiency of emotional control particularly the rage reaction. Hostile and aggressive behavior is facilitated by these defects even though its form and content are determined by unconscious factors based upon parent-child relationships. Not being well understood, these children are subjected to the same pressure and requirements as their normal siblings and mates. The resultant rebellious or withdrawn behavior is misinterpreted or futilely treated, trouble begins to pile up and delinquency is in the offing. When they are properly understood, however, the impossible is no longer expected of them. Very often medical treatment of the apparent neurophysiological disturbances, along with proper adjustments of psychological relationships in the environmental patterns, brings about an increasing improvement, aided and abetted by normal physiological growth. Then the beginning of a favorable readjustment is at hand.

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The Clinical Significance of Chronic Parametritis

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IT long has been recognized that the parametrium plays an important role in serious and extensive diseases of the uterus such as inflammations, carcinoma and endometriosis. The purpose of this report, however, is not to draw further attention to this complication but to a related and seldom recognized condition which is characterized by a demonstrable thickening of the sacro-uterine ligaments and an associated train of symptoms. It is not described in our standard textbooks of gynecology, with the exception of Emge's chapter on Inflammations of the Cervix Uteri in Davis' Obstetrics and Gynecology,[3] and his reference is mostly concerned with the complications of acute cervicitis.

MATERIAL

This study is based on 54 patients observed in private practice. The actual incidence of the condition is difficult to determine since many cases were observed in consultation only, but a rough estimate would indicate that it occurs in about 6 per cent of all patients seen by the gynecologist. This figure certainly directs particular attention to the importance of the syndrome.

The age distribution is given in Table 1 and it may be noted that it is a disease predominantly found during the active sexual life of women, with the maximal frequency between 25 and 35 years of age. It occurred much more frequently in multigravidae than in women who have had no pregnancies. Of the 54 cases, 16 had had one pregnancy, 15 had had two, 11 had had three or more, while only 12 were nulligravidae.

SYMPTOMATOLOGY

As shown in Table 2 chronic parametritis* may be responsible for many complaints, but the most constant one was pain in the lower abdomen and it was presented by 40 of the 54 patients. In 18 instances it was referred to both lower quadrants, while one or the other side was affected in each of 11 cases. The pain was described mostly as of a dull aching character but also as cramp-like, and frequently as "a sort of burning sensation." It was rarely localized to a definite area; in fact, the patient was often vague in attempting to point to "the spot that hurts."

TABLE 1.—*Age Distribution*

Years	No. of Cases
15 to 19	1
20 to 24	9
25 to 29	13
30 to 34	15
35 to 39	9
40 to 44	5
45 to 49	2
Total	54

TABLE 2.—*Symptoms*

	Cases
Pain lower abdomen	18
Vaginal discharge	12
Pain R.L.Q.*	11
Pain L.L.Q.†	11
Dyspareunia	11
Metrorrhagia	9
Backache	8
Dysmenorrhea	6
Pain defecation	5
Pain down leg(s)	4
Nausea	2
Unilateral backache	2
Frequency urination	2
Diarrhea	1

* Right lower quadrant of the abdomen.
† Left lower quadrant of the abdomen.

Although often worse during menstruation, the pain at times was relieved by the onset of a period. Of special importance from a diagnostic standpoint because they can be explained on the basis of the anatomic lesion are pains during sexual intercourse and during defecation. Recently, two women reported the occurrence of sharp pain while inserting or removing a contraceptive diaphragm. The irregular bleeding noted in nine instances consisted merely of "spotting" and was considered as a complication of cervicitis with erosion and not as bleeding from the fundus uteri.

The lesion is essentially chronic in nature. As described in this report it is not a disease for which patients are sent to a hospital or which demands instant medical attention. The patients do not have nausea, vomiting, fever, leukocytosis or other indication of an acute abdominal or pelvic lesion demanding emergency surgical care. Only nine patients of this series had had symptoms for less than one month, and while one of the remaining 45 had had them for less than two months, 44 traced their difficulties for periods of from more than three months

Presented before the San Francisco County Medical Society, October 9, 1945, and the San Francisco Gynecological Society, November 9, 1945.

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* Oria and Fraenkel,[5] although studying this problem from a different angle, call the lesion "parametritis posterior."

to several years. In one woman abdominal pain had occurred off and on for 15 years.

DIAGNOSIS

The diagnosis is established by the demonstration of a thickening and marked tenderness of one or both sacro-uterine ligaments. These structures differ from our usual concept of a ligament as they are not permanent cords and more correctly should be termed the "plicae recto-uterinae" or "the recto-uterine folds of Douglas." They consist of two crescentic thickened folds of peritoneum which arise from the uterus at about the level of the internal os, sweep laterally on each side of the rectum and become reflected on the posterior pelvic wall at about the level of the second and third sacral vertebrae. Between these two folds are found muscle fibers and a diffuse fibro-elastic meshwork, so that they have been considered important factors in supporting the uterus (Blaisdell,[1] Tandler,[7] Oria and Fraenkel[5]) and various surgical procedures have been advanced to utilize them in performing a suspension operation (Bovee,[2] Goffe,[4] Somers and Blaisdell[6]). In addition, many blood vessels and lymph channels are also found which lead to the left latero-sacral and hypogastric groups of glands.

In normal individuals the sacro-uterine ligaments are difficult to palpate but in the presence of a chronic inflammatory lesion it is relatively simple, and two methods are available. One, advocated by Somers and Blaisdell,[6] consists of drawing the cervix down with tenaculum forceps so that the ligaments may be felt with the examining fingers in the vagina. An even simpler procedure consists of a recto-vaginal examination. In this case the index finger in the vagina applies pressure to the posterior surface of the cervix in order to bring it forward and upward. This puts the sacro-uterine ligaments under tension so that they may readily be palpated by sweeping the middle finger in the rectum from side to side. The tenderness elicited by this procedure is usually very marked, and in some cases of accentuated parametritis the folds are thickened to the point that they give the impression of being bands of even as much as 1 cm. in diameter. In this series both ligaments were involved in all cases, but involvement was more pronounced on the right side in five instances and on the left in seven.

Tenderness is not usually elicited on moving the uterus from side to side, as contrasted with the response when this diagnostic manipulation is done in women with pelvic inflammatory disease. However, in four cases tenderness was found when the uterus was elevated by pressure from below upward.

In the differential diagnosis a prime consideration is endometriosis of the recto-vaginal septum and the sacro-uterine ligaments. This disease and parametritis may be confused, but in endometriosis the pain is greatly intensified at the time of menstruation, and on palpation the lesion tends to have a nodular character. It likewise fails to respond to the heat treatment advocated in this report.

This type of chronic parametritis is primarily a direct result of inflammatory lesions of the cervix uteri which was demonstrable in 34 of the 54 patients of this series (Table 3). In the other 20, however, it was not possible to find any existing cervicitis either on examination or by scanning the clinical history. The occurrence of retroversion-flexion of the uterus in 16 of the 54 suggests that it may be a factor, but doubt must be entertained on this point since this position of the uterus is present in about 25 per cent of all apparently normal individuals.

TABLE 3.—*Associated Lesions*

Cervicitis with erosion	24
Retroversion-flexion uterus	16
Chronic cervicitis	10
Cystitis	2
Cryptitis	1

TREATMENT AND RESULTS OF TREATMENT

The treatment consists essentially of two procedures. In the first place any inflammatory lesion of the cervix with or without erosion must be eliminated by recognized measures such as cauterization or conization. Secondly, the application of heat. This may be accomplished by diathermy, but a simpler method which can be conducted by the patient herself is to employ hot Sitz baths with continuous douche. The patient is instructed to sit in a bathtub with the water reaching up to her waist and as hot as she can tolerate. While seated, she gives herself a continuous plain hot water douche under low pressure. This should be done for 20 minutes once or twice daily except during the menses.

It has been possible to follow up 33 of the 54 patients in this series. Cauterization of the cervix was done, following a preliminary course of hot baths lasting from two to five weeks, in 13 cases; 19 were treated solely with hot baths, and in one instance no treatment was given.

The results are given in Table 4. It is noted that of the 33 patients 14 were completely free of symptoms and in them no evidence of thickened sacro-uterine ligaments could be made out after varying periods of time; definite improvement occurred in 13 instances; in six cases there was no relief. However, of those cured or improved, six later returned

TABLE 4.—*Results*

Result	Duration of Treatment	No. of Cases
Cure	1 month	2
	2 months	2
	3 months	3
	over 3 months	7
	Total	14
Improved	1 month	7
	2 months	1
	over 3 months	5
	Total	13
Not improved	1 month	2
	2 months	2
	over 3 months	2
	Total	6
Recurrences		6
No follow-up		21

with recurrence both of symptoms and the physical findings.

SUMMARY

The existence of a chronic parametritis is evidenced by a thickening and tenderness of the sacro-uterine ligaments which are readily demonstrated on recto-vaginal examination. This lesion is usually a sequela of cervicitis and may be associated with numerous symptoms, the most characteristic of which are lower abdominal pain, dyspareunia, backache, dysmenorrhea, and pain on defecation.

The treatment consists of attending to any existing cervical lesions and the use of hot Sitz baths and douches.

The results obtained in a small series of cases are given.

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MEDICAL PROGRESS:

Acute Appendicitis in Childhood; A Summary of Present Concepts

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INCIDENCE

CHILDREN below the age of 14 years account for almost one-quarter (22.5 per cent) of the overall incidence of acute appendicitis. The disease is relatively rare in infants and young children, increasing rapidly in frequency of occurrence as the child approaches adulthood.[4] Males are affected slightly more often than females.[5,10]

ETIOLOGY

The structure and position of the appendix tend to promote stasis, with frequent formation of concretions, change in pressure-distention relationships, and interference with blood supply. Bacteriologic invasion of the wall of the organ follows.[5,12,14] The infecting organisms vary widely, by far the most frequent being E. coli.[5] Hemolytic and non-hemolytic streptococci are found considerably less often. Oxyuris vermicularis is present in a relatively low percentage of cases. The invading organisms are believed to belong to the normal flora of the colon. There is no direct evidence that a correlation exists between the incidence of acute tonsillitis or other acute upper respiratory infection and acute appendicitis.[5,12] There are certain anatomic factors in children which profoundly modify the course of the disease. The appendiceal wall contains relatively less fibrous tissue and more elastic tissue in children than in adults, causing a tendency toward earlier perforation.[13] The appendix in a child is relatively longer as compared with the size of the peritoneal cavity, the cecum more mobile, and the omentum shorter and thinner, than in the adult, resulting in less efficient localization of the inflammation.[12] The younger the child, the more these factors affect the disease.

DIAGNOSIS

A general rule applicable for diagnosis is that "abdominal pain, vomiting, and slight fever should always be considered as due to acute appendicitis until proved otherwise."[12] Abdominal pain is the most constant symptom, appearing in over 95 per cent of all cases.[5,10,12] In non-perforated acute appendicitis, about two-thirds of the patients localize the pain in the right lower quadrant, the remainder in the peri-umbilical region, or generalized throughout the abdomen. Following perforation, however, less than half exhibit right lower quadrant localization. Over 80 per cent of children with acute appendicitis vomit.[5,10,12] When nausea and anorexia are included in this symptom complex, the percentage so affected rises considerably.[10] Usually the pain precedes the vomiting, but occasionally the reverse is true, especially in children under four years of age. Constipation is present in 13 to 26 per cent of cases, diarrhea in 8.7 to 16 per cent. About 10 per cent or less have urinary complaints.[5,10,12] Less than one-third of these patients have a history of a previous similar attack.

The rectal temperature is usually between 100° F. and 101° F. in cases of non-perforated acute appendicitis and between 101.5° F. and 103.5° F. after perforation occurs. Maximum tenderness is present in the right lower abdominal quadrant in 76 to 98 per cent of patients.[5,10,12] Rectal tenderness can be elicited in 87 per cent of cases.[5] The rectal examination is of great importance, especially considering the frequent tendency of the appendix in children to be directed downward into the pelvis,[11] thus altering the abdominal signs. Abdominal tenderness and muscle spasm may be diminished or even absent in pelvic appendicitis. Spasm of the right rectus muscle is present in 64 per cent of patients having non-perforated acute appendicitis, this figure rising to 94 per cent following perforation.[5,10,12]

A leukocytosis greater than 10,000 is found in over 90 per cent of cases of acute appendicitis, and an increase in the polymorphonuclear cell ratio in over 95 per cent, assuming the normal relative lymphocytosis of childhood is taken into account.[5,10,12] Urinalysis is important mainly for the estimation of the state of hydration by the degree of acetonuria and for the purpose of ruling out urinary infection. Although, occasionally, erythrocytes may be found in the urine secondary to ureteral irritation due to an adjacent acutely inflamed appendix, no such relationship between pyuria and appendicitis can be demonstrated.[5]

The symptoms and signs of acute appendicitis in children are very similar to those seen in adults, provided they can be correctly elicited. The older the child the less difficult this becomes. In the very young, however, irritability, disturbed sleep, and crying spells may continue for hours before vomiting or refusal of food direct the parents' attention to the abdomen. The consequent delay in hospitalization is an important factor in producing a higher incidence of peritonitis, and therefore the relatively higher

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mortality and morbidity in this age group. Once the patient is in the hospital, frequent (hourly or oftener) examinations are necessary until the decision to operate is made or the diagnosis of acute appendicitis discarded. Patience and unhurried gentleness are prerequisites for a successful examination. The abdomen should always be palpated first, before other, more frightening aspects of the procedure are carried out.[12] Special abdominal signs such as rebound or referred tenderness are often difficult to elicit and are, therefore, of less value in children than in adults. In performing the rectal examination the finger should be inserted very slowly to prevent sudden painful dilatation of the anal sphincter. The finger tip should explore the pelvis slowly and gently while an attempt is made to direct the child's attention elsewhere.

When diarrhea is present in acute appendicitis, a pelvic mass, or evidence or peritonitis is usually found.[12] If not, some aid in differential diagnosis may be gained by evaluation of the pain, which is continuous in acute appendicitis and recurrent in acute enteritis. Lower abdominal pain persisting longer than 12 hours should be considered due to appendicitis unless proved otherwise.[7] There is no reliable method to differentiate acute appendicitis from mesenteric adenitis.[1] If the patient has an upper respiratory infection, and a highly febrile onset, mesenteric adenitis may be suspected. If appendicitis cannot be ruled out, however, operation should be performed. Occasionally an appendiceal abscess is palpable (14.2 per cent of cases in one series[10]). Frequently, however, these masses are present but not diagnosed preoperatively.[5]

TREATMENT

The treatment of acute appendicitis in childhood is early appendectomy. To this may be added, "When there is reasonable doubt [as to the diagnosis], operate."[10] This holds true whatever the stage of the disease, since, because of the poor localizing factors of the child's peritoneum, the delayed operation or Ochsner regime produces an increase in overall mortality and in morbidity in terms of prolonged hospitalization.

Preoperatively, a delay sufficient to combat dehydration is advisable, although with the average patient this can be accomplished in the interval during which the laboratory data are being gathered or the operating room prepared. Parenteral sulfonamide and antibiotic therapy may be initiated at this time in the very ill. If general peritonitis is present it is well to institute gastric suction prior to surgery. Open drop ether has proved in most cases a safe and reliable anesthetic.

The McBurney incision is the incision of choice and should be used in uncomplicated acute appendicitis, in perforated appendicitis with general peritonitis, in perforated appendicitis with right lower quadrant abscess and in cases of doubtful diagnosis in which acute appendicitis is most likely. A right rectus muscle splitting or medial muscle retracting incision may be used when a pelvic mass is present within which the appendix is presumed involved, and in cases of doubtful diagnosis wherein the "odds" are against appendicitis. This incision may also prove advantageous in the occasional case in which perforation has occurred into the omentum, with resulting good localization. If the diagnosis can be made preoperatively, by detection of a moveable mass, the operation may be made "clean" by resection of the involved omentum together with the appendix without disturbing the site of perforation.[10] Drainage, when indicated, in cases of right rectus incision, should be established through a "stab" wound in the McBurney area. A lower mortality is associated with the use of the McBurney incision,[4,10] although there is disagreement upon its advantages in children.[5,12]

In freeing a perforated appendix from surrounding structures, gentle dissection with the suction tip is recommended. The blunt instrument adequately separates the adhesions while carrying off the surrounding purulent debris. The stump of the organ should be inverted when this is possible without endangering surrounding organs or unduly prolonging the operation. One to three grams of sulfanilamide crystals are left within the peritoneal cavity if the appendix has perforated, since it is felt that an effective blood level is rapidly attained in this way. Drainage is advocated in most cases of acute perforated appendicitis in children in spite of the recent trend against this procedure in adults similarly afflicted.[9]

The "anti-localizing" factors of the child's anatomy are important in preventing complete resolution of the peritoneal infection as frequently or quickly as this occurs in adults. Two folded rubber dam drains are used. The larger is placed within the posterior cul-de-sac and led outward adjacent to the parietal pelvic peritoneum, and through the wound (if McBurney) or a "stab" wound in the McBurney area. The smaller drain is placed within the inferior right lumbar gutter, emerging adjacent to the first. To preclude small intestinal obstruction or fecal fistula, neither drain should pass between loops of bowel, nor lie against the appendiceal stump.[12] The removal of the drains is as important as correctly placing them, for a pelvic abscess will frequently follow their premature withdrawal. The lumbar drain should be removed in 48 to 72 hours, at which time the pelvic drain is loosened. When the character of the drainage changes from frankly purulent to mucopurulent (fourth to seventh postoperative day as a rule) shortening at the rate of 2 centimeters daily begins. As the drainage becomes small in amount and mucoid in character, the drain is removed (usually upon the ninth to twelfth postoperative day).

It has been recommended on good authority[2,12] that appendiceal abscesses simply be drained, with removal of the appendix only if it is "easily available." This assumes an "interval" appendectomy at some later date. We feel, however, that an effort should be made to remove the organ at the primary operation and that in most cases this can be done.[9,13] To leave the appendix invites recurrence of the infection prior to the secondary operation, and requires

two anesthesias and two laparotomies to accomplish a single result. With modern antibiotic and chemotherapy, the localizing wall of the abscess need no longer be so meticulously avoided by the operator.

The postoperative treatment of these patients is of great importance. In the uncomplicated case of acute non-perforated appendicitis, adequate oral fluid intake usually occurs from the first postoperative day onward, ambulation may be begun at any time after the first postoperative day, with discharge from the hospital in five to seven days. No antibiotic nor chemotherapy is given. When perforation has occured, particularly with general peritonitis, more vigorous measures must be undertaken. Fowler's position is frequently advocated [5,12] but we feel that the resultant pooling of pus within the pelvis promotes adhesions and intestinal obstruction. The dorsal recumbent position with frequent turning from side to side is recommended instead. Hydration is accomplished intravenously by giving 75 to 90 cubic centimeters of 5 per cent dextrose in 0.85 per cent saline, or 5 per cent dextrose in distilled water per pound per day to children under two years of age, 45 to 60 cubic centimeters per pound per day to those over that age. Care is taken to replace only the sodium chloride lost by the normal metabolism plus the loss incurred with the use of gastric suction. The blood chemistries are closely followed and complete intravenous caloric and amino acid replacement attempted only if the period of gastric suction continues longer than three days. Frequently, transfusions are required during the acute postoperative period, or, later, to hasten convalescence. No transfusion should exceed 10 cubic centimeters per pound of body weight. Gastric suction is used for one to five days postoperatively as indicated to combat distention. Frequent use of the rectal tube is also helpful in this respect. External application of heat to the abdomen is not recommended since, following the increase in intra-abdominal temperature, the gases within the bowel tend to expand, and may cause further pain.

Chemotherapy with divided daily dosage of sodium sulfadiazine, 32.4 to 48.6 mg. (½ to ¾ grain) per pound intravenously or subcutaneously is begun 12 hours postoperatively. The interval allows for the absorption of the intraperitoneal sulfanilamide. The dose is increased to 65 mg. (one grain) per pound per day of sulfadiazine when the drug can be taken orally. Antibiotic therapy with penicillin and streptomycin is also employed in the very ill. On the theory that about eight times more penicillin is needed to destroy the staphylococcus or streptococcus in the presence of E. coli than when this invader is absent, large doses of this agent are used.[3] Intramuscular penicillin, 50,000 units every three hours, is given to children under five years of age, the dosage increasing with the age thereafter. Streptomycin is given by intramuscular injections every three hours, the total daily dose being 1 gm. for children under five, increasing with age. This drug is discontinued in from four to eight days, or sooner, depending upon the course of the infection. As streptomycin has become more available, our policy has been to use it more, and penicillin less frequently. The oxygen tent is occasionally of value in the immediate postoperative period. Liberal sedation using barbiturates, codeine, or morphine should be employed during the acute illness.

COMPLICATIONS

The complications of appendicitis most often seen are residual peritoneal abscesses (usually pelvic in location), intestinal obstruction, pneumonia, and wound abscess.[10,12] Since the advent of sulfonamide therapy, both pneumonia and intestinal obstruction have materially decreased in incidence.[10] Wound abscess is preventable by draining the incision to the depth of the peritoneum in all cases wherein there is a question of contamination. When this precaution is taken the complication is rare. Residual pelvic abscesses and intestinal obstruction remain the most frequent complications at the present time, being found in 6.7 per cent and 3.9 per cent of cases respectively.[12] These residual abscesses will almost invariably subside with antibiotic and chemotherapy, although occasionally one will drain spontaneously into the rectum or vagina. Intestinal obstruction usually occurs between the fifth and fourteenth postoperative days. About half the cases respond to gastric or small intestinal suction-decompression and chemotherapy. The remainder require secondary laparotomy and lysis of adhesions. The Miller-Abbott tube is of little value in patients under five years of age due to difficulty in passing the tip through the pylorus.

PROGNOSIS

The mortality in acute appendicitis varies mainly with the age of the patient, the stage of the infection when treatment is started, the presence of other disease, and the type of therapy. The fatality rate from this condition in the United States is 4.5 to 5 per cent, including all age groups.[6] The age variation is illustrated by a crude mortality figure of 17.22 per cent for patients under five years of age, 6.2 per cent in the five to nine year group, and 2.74 per cent in those between nine and fourteen years old.[4] The effect of the stage the disease has reached when operation is performed is shown by a mortality of 0.96 per cent in non-perforated appendicitis as compared with that of 10.76 per cent following perforation.[10] There are two essential factors in children which affect the stage of the disease at operation, and thus the fatality rate. One of these is the anatomic difference in intraperitoneal relationships between the young child and the adult. The second is the delay in operation due chiefly to difficulty in diagnosis. The younger the child, the more heavily do both factors weigh against him. In one series, 80 per cent of children under four years of age had peritonitis at operation as compared with 37 per cent of older children.[5] In another, 3 per cent of appendices had perforated after 12 hours of symptoms, 50 per cent after 24 to 36 hours, 64 per cent after 36 to 48 hours, and 90 per cent after five days.[12] It is by decreasing the delay

prior to operation, especially in the very young, that the fatality rate of this disease can be reduced. That the type of treatment has marked influence upon the mortality can be seen by comparison of present statistics with those prior to the use of sulfonamides, antibiotics, and the preoperative and postoperative care practiced today. In one series,[10] the fatality rate in acute non-perforated appendicitis has fallen from 6.06 per cent during the period between 1924 and 1929, to zero during the interval 1940 to 1944. In another series[12] the mortality in acute appendicitis with perforation was 6.43 per cent prior to 1938, and 2.99 per cent between 1938 and 1944. The overall child fatality rate in this same group decreased from 3.06 per cent (1928-1939) to 1.58 per cent (1939-1945). Each series under discussion included over 500 cases. Perforated appendicitis in patients between the ages of one to four years now accounts for practically the entire mortality.

SUMMARY

1. Children under 14 years of age account for almost one-fourth of the overall incidence of acute appendicitis.

2. Certain anatomic factors of the child's appendix and its relationship to the peritoneal cavity favor relatively early perforation and poor localization of the infection.

3. "Abdominal pain, vomiting, and slight fever should always be considered as due to acute appendicitis until proved otherwise."

4. Principles of treatment recommended are:

a. Operation as soon as possible after the diagnosis is made and the patient adequately prepared;

b. Laparotomy if there is a reasonable doubt as to the diagnosis;

c. The use of the McBurney incision in most instances;

d. Removal of the appendix concurrently with drainage of an appendiceal abscess;

e. Drainage of the abdomen in most cases of acute perforated appendicitis.

5. Refinements of treatment and the addition of chemical and antibiotic therapeutic agents have materially decreased the fatality rate of acute appendicitis in children.

6. The chief factors affecting the mortality at present are the age of the patient and the delay prior to operation.

7. Practically all the deaths due to this disease in children fall within the group of acute perforated appendicitis between the ages of one and four years.

8. Special effort should be made to expedite the diagnosis in the very young, thus reducing the preoperative delay, and consequently the mortality.

4614 Sunset Boulevard.

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CASE REPORTS

◀ Persisting Hiccups ◀ Post-Anesthesia Respiratory Difficulty ◀ Scrotectomy for Scrotal Elephantiasis ◀ Mesenteric Vascular Occlusion

Persisting Hiccups

JOHN A. STILES, M.D., *Palo Alto*

THIS is a report of a case of a 62 year old man with a history of hiccups of 40 days' duration, starting two days after he stopped smoking. The patient was ambulatory and visiting around the country between Chicago and San Francisco for the first 38 days of his disease. On entrance to the hospital, laboratory findings revealed nothing significant. Physical examination was essentially negative except for the hiccups at a rate varying between 8 and 16 per minute. There was a history of mild bronchial asthma and one mild coronary attack about one year previously.

The hiccups were relieved by carbon dioxide inhalations and breathing into a paper bag. An attempt was made to block the phrenic nerves; the right was apparently blocked but the left was not. This did not give any relief. On the 41st day 90 mg. of intocostrin was given. (The patient's weight was 135 lbs.) This was sufficient to paralyze respirations completely for 20 minutes, and during that time oxygen was given, and for the subsequent 15 minutes the patient was given a 50-50 nitrous oxide-oxygen mixture to breathe until respirations returned to normal. After this treatment the hiccuping stopped for about five hours, then returned at a slower rate, approximately four to eight per minute. Twenty-four hours later sodium amytal was given, 0.5 gm. intramuscularly, followed 20 minutes later by another 0.4 gm. of the same drug. The patient then slept ten hours without hiccups, and this period was followed by six hours with occasional hiccups while awake. Twenty-four hours later 1 gm. of sodium amytal was given intramuscularly and the same period of sleep and relief of the hiccups followed. Thereafter the patient remained free of hiccups.

Post-Anesthesia Respiratory Difficulty

A five-hour anesthetic was administered to a 65 year old man for a left pneumonectomy. The method used had been endotracheal nitrous oxide, supplemented with intravenous curare and morphine. The operation and anesthetic were both uneventful and the patient left the operating room in good condition, his reflexes present.

During the few minutes necessary to transport him to his room he was given oxygen by means of a bag and mask. About ten minutes after leaving the operating room, slight dyspnea was noted, and this became marked in a few minutes; positive pressure on the breathing bag was necessary to effect a good exchange. Within five minutes of the onset of the more marked dyspnea, this method no longer kept the patient oxygenated. The pulse rate began to rise and shortly was over 120 per minute, increasing rapidly. At the same time, cyanosis became evident. At this point the patient lost consciousness and reintubation was performed, whereupon the cyanosis disappeared and the pulse rate decreased slightly. Even by this means, respiratory exchange was difficult and inadequate.

To percussion the left chest showed increased resonance and the heart was definitely shifted to the right. A large needle was inserted in the left pleural cavity with almost immediate return of spontaneous respiration and further decrease in pulse rate. The needle was left in place for 24 hours, connected to a rubber tube the end of which was left under water seal. Recovery was uneventful.

1492 Emerson.

Chairman's address, read before the Section on Anesthesiology at the 76th Annual Session of the California Medical Association, April 30-May 3, Los Angeles.

Scrotectomy For Scrotal Elephantiasis

PERRY BONAR, M.D., *San Rafael*

ELEPHANTIASIS arabum (tropicum), an obstructive lymphatic disease produced by repeated mosquito inoculation of filaria bancrofti, is a fairly common finding among the natives of some of the Pacific Islands.

While on Naval duty in the New Hebrides Islands in 1943, the author was called in consultation by the French Mission Surgeon to examine a native who had been afflicted for the past ten years with scrotal elephantiasis.

CASE REPORT

Examination revealed a well developed and nourished Melanesian male about 40 years of age encumbered by a large scrotal mass measuring approximately 20 x 14 inches, as shown in Figure 1.

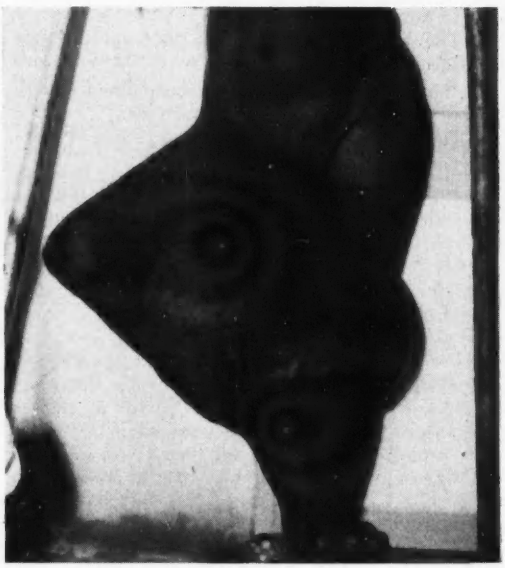

Figure 1

Consistency of the scrotal skin was leathery and obviously diseased except in the region of the apex of the mass where its appearance was comparatively normal. The bulk of the mass was "doughy" to palpation.

Surgical removal of the diseased scrotal tissue and plastic reconstruction to cover the penis and testicles was the only feasible curative procedure to be considered.

To facilitate handling the mass during operation, two hooks were rigged to an overhead tackle and placed in the dependent tissue.

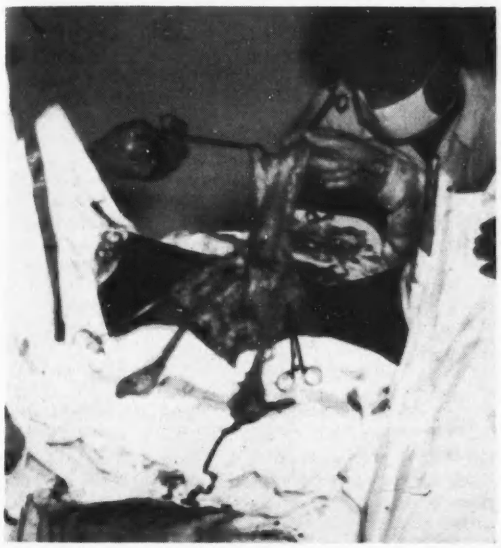

Figure 2

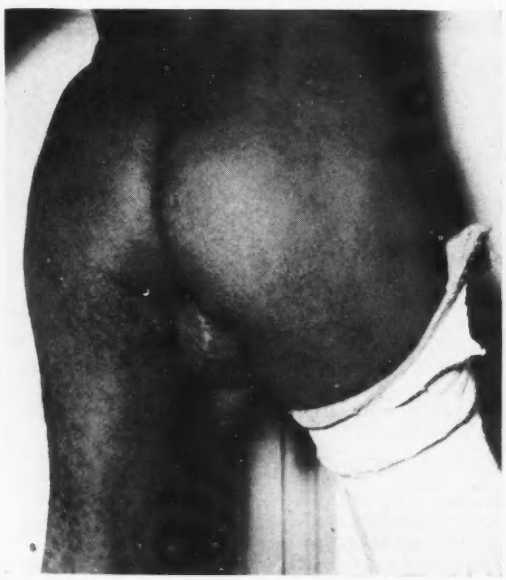

Figure 3

A "U" scrotal incision was made 2 cm. laterally from each pubic tuberosity downward to meet just below the orifice of the drawn down foreskin.

By progressive dissection with a guiding sound in the urethra, the body of the penis was delivered from the scrotal mass. Both cords and testicles were then isolated and delivered by blunt dissection and found to be normal except for elongation of the cord to about 8 inches.

With the penis and testicles free and placed on the lower abdomen, two flaps were fashioned from the lateral aspects of the upper scrotum by two incisions extending from each pubic tuberosity downward and backward to join in the mid-line, posterior to the scrotum. This procedure was greatly facilitated by the employment of the previously described tackle arrangement. The scrotal mass was severed and residual diseased tissue was removed to expose the transverse perineal muscles (Figure 2). Only slight vascularity was encountered in the deep tissues in comparison to the very marked vascularity encountered during the superficial dissection. Both spermatic cords were shortened by a loose gathering suture and the appropriate skin edges approximated by interrupted dermal sutures to form a new scrotum and penile covering. A rubber dam drain was placed in the dependent angle of the scrotum.

The postoperative course for several days was rather stormy with temperature reaching 104° F. and considerable seropurulent drainage, most abundant from the scrotal region. Edema of the penile skin was marked but this completely subsided at the end of four weeks, at which time healing was complete (Figure 3).

Pathological examination of the removed scrotal tissue revealed marked connective tissue proliferation, interstitial edema and markedly dilated lymphatic vessels. There was no evidence of the presence of microfilariae in either the expressed lymph or in numerous stained tissue sections.

Surgical and functional results were gratifying and remained so at the end of eight months when the patient was last examined in his jungle habitat.

The author is deeply grateful to Dr. Charles Dinardo of Cleveland and Dr. Charles Steiss of San Francisco for their able assistance in the performance of this unusual operation.

1322 Fifth Avenue.

Mesenteric Vascular Occlusion

ALBERT H. NEWTON, M.D., *Yreka*

THE occurrence of mesenteric vascular occlusion is infrequent enough (573 cases reported up to 1946, with 36 cases successfully resected) to warrant a report of six cases in which the author has operated.

Mesenteric vascular occlusion may be venous or arterial or both. Gradual occlusion of a superior mesenteric vessel may occur without abdominal symptoms. If sudden occlusion of a main branch of the superior mesenteric vessel occurs, necrosis and gangrene result. Embolus or thrombus precede arterial occlusion; in venous occlusion thrombosis occurs.

The causes of venous and arterial occlusion of the mesenteric vessels are many: Hematogenous, portal obstruction; cardiac valvular disease; septic abdominal lesions; intestinal lesions; puerperal sepsis; degenerative diseases (such as arteriosclerosis); mechanical damage, and obstruction. Hernias and volvulus are excluded. In many cases there is no apparent cause.

In its clinical features, mesenteric vascular occlusion is characterized by pain which may be dull and cramping or sudden and severe. The pain is centrally located and in-

Read before the sections on General Medicine, Neuropsychiatry, and Industrial Medicine and Surgery at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

cessant, not accompanied by muscle spasm or extreme tenderness. Three points are distinct features of the pain: (1) It is more severe than clinical findings warrant; (2) It is not alleviated by morphine; (3) There is much less tenderness than might be expected with such intense pain. The leukocyte count is variable; pulse rate is high in relation to temperature; dehydration occurs rapidly; abdominal distention occurs late; there is no definite pathognomic sign or symptom.

Failure to diagnose the disease may be due to the comparatively low incidence of it. (There were 44 cases of it in 41,982 admissions to the Michael Reese Hospital in a ten-year period; 17 cases occurred at Bellevue Hospital from 1939 to 1944; there were 13 cases in 300,000 admissions to the New Orleans Charity Hospital.)

The mortality rate is high—84 per cent in a series of 19 cases in which operation was done by Whittaker and Pemberton. Three successful cases of resection were reported in a series of 15 cases by Ficana in 1944. Each year since 1895 when Eliot reported the first successful resection of the small intestine for mesenteric thrombosis, there have been reports of individual cases. The reason for reporting them may be that this entity is so infrequently encountered by the average surgeon. Or it may be because the pathological process revealed at operation is so dramatic that it leaves an everlasting impression on the surgeon's mind, especially in those cases in which resection produces an operative cure.

Extensive mesenteric occlusion is fatal unless treated surgically. Complete removal of the affected bowel and mesentery, with immediate anastomosis, produces the best results. The use of anticoagulants with operation is advised.

The following six cases occurred in 23,350 admissions to the Siskiyou County General Hospital from January, 1933, to January, 1947.

CASE REPORTS

CASE 1.: A married woman, aged 31, para 4, well developed and well nourished, was admitted to the hospital September 6, 1933, with a history of sudden, severe abdominal pain which had begun two hours previously. Pain caused complete physical collapse.

The abdomen was tender to palpation. There was a low mid-line abdominal operative scar in good condition. The pain, which was generalized on admission but after several hours was localized in the lower abdomen, was not relieved by morphine. The leukocyte count was elevated, the urine negative. Fifteen hours after admission, the patient was taken to surgery and when the abdomen was opened through a low mid-line incision, approximately 25 cm. of small bowel was found to be gangrenous. The gangrenous bowel was resected, the efferent and afferent loops were exteriorized, and the wound was closed with drainage.

The pathological specimen showed a 30 cm. segment of intestine with thickened turgid walls and hemorrhagic discoloration.

The postoperative course was stormy, and three weeks later a secondary operation was performed, the exteriorized loops of bowel freed and a side-to-side anastomosis done.

Recovery then was uneventful, and the patient now has been in good health for 14 years.

Conclusion: Mesenteric venous thrombosis involving 30 cm. of ileum with complete recovery by operative resection.

CASE 2: A 74-year-old woman, para 4, entered the hospital January 30, 1935. The complaint upon admission was severe abdominal pain. Pain had begun one hour before admission. A cancer of the breast had been diagnosed one month previously.

The pulse was 120, the leukocyte count 16,000. Urinalysis showed a trace of albumin. Intense abdominal pain was little relieved by morphine. The patient, whose condition was generally poor, was operated upon the morning after admission.

When the abdomen was opened through a high mid-line incision, the intestine was found to be massively distended and the entire small bowel and the ascending colon were dark and discolored. There were palpable metastatic cancerous nodes throughout the retroperitoneum. Thombosis of the superior mesenteric artery was demonstrated. The abdomen was closed and the patient died of circulatory failure ten hours later.

Diagnosis: Carcinoma of the breast with retroperitoneal metastasis and thrombosis of the superior mesenteric artery with gangrene of the entire small bowel and ascending colon. Permission for autopsy was refused.

CASE 3: A 51-year-old man entered the hospital February 7, 1936, with a complaint of acute abdominal cramp-like pain associated with fever and rapid pulse. The patient had been acutely ill for two days.

The leukocyte count was elevated, the heart was enlarged and was fibrillating. There was excessive vomiting. The patient was taken to surgery on the day of admission. Through a high right rectus incision, the abdomen was found to be filled with dark fluid. There was a large indurated mass involving the pylorus of the stomach, and the mesentery of the small bowel was studded with cancerous nodules. About 50 cm. of small bowel was found to be discolored and necrotic. Resection of the necrotic bowel was started but the patient suddenly died. Permission for autopsy was not obtained.

Conclusion: Carcinoma of the stomach with retrograde metastasis and venous thrombosis with gangrene of the small bowel.

CASE 4: A 31-year-old woman, well developed and well nourished, para 1, entered the hospital June 28, 1938, with a complaint of acute abdominal pain. Illness had begun two days previously with acute colicky pain in the abdomen associated with vomiting.

Examination revealed abdominal distention. The patient had been operated upon a year previously for pelvic disease. The general physical examination was negative except for rapid pulse and vomiting. Pelvic examination revealed a mass in and about the uterus. The leukocyte count was 14,000.

Under spinal anesthesia the low mid-line scar was resected, the abdomen was opened and a segment of necrotic small bowel was found adherent to the fundus of the uterus. There was a wedge-shaped portion of the mesentery which was edematous. Twenty cm. of ileum was resected and an end-to-end anastomosis was done with a proximal ileostomy. The resected specimen showed hemorrhagic discoloration and some fibrin deposited on the surface. The mucosa was ulcerated and was replaced by greenish surface covered with fibro purulent exudate.

Recovery was uneventful and the patient remained in good health until 1943 when the uterus was removed because of uterine fibroids with menorrhagia. When last interviewed, in March, 1947, the patient had no complaints.

Conclusion: Mesenteric venous thrombosis, probably due to postoperative adhesions with torsion of the bowel, cured with bowel resection.

CASE 5: A woman, 47 years of age, para 4, was admitted to the hospital August 7, 1946, with a complaint of severe abdominal pain with vomiting of four days' duration. The patient's abdomen was distended and there was fecal vomiting. The temperature was normal, pulse was 92. The leukocyte count was 3,550 with normal differential. Urinalysis showed a trace of albumin. Repeated saline enemas gave negative results.

Under spinal anesthesia the abdomen was opened through a mid-right rectus incision. Intra-abdominal exploration revealed a markedly distended gangrenous small bowel and an extensive mesenteric thrombosis. One hundred and twenty-five cm. of gangrenous bowel was resected. No attempt was made to anastomose the proximal and distal loops because of the poor condition of the patient. The loops were exteriorized through the operative wound.

The postoperative course was stormy. On September 16, 1946, the patient was operated upon again, and through a left rectus incision the exteriorized loops of bowel were freed and an end-to-end anastomosis of the proximal and distal loops was done. A draining fecal fistulous tract developed through the original operative wound.

Discharged from the hospital October 15, 1946, as improved, the patient remained at home as a semi-invalid during the next two months. The fecal fistulous tract persisted. The patient was rehospitalized December 5, 1946, and the fistulous tract was resected down to the site of the bowel anastomosis. The opening into the bowel was closed. The patient returned home nine days later and died suddenly December 19, 1946.

At autopsy the small bowel showed inflammatory changes at the anastomosis site. The vena cava was filled with clotted blood. The gross appearance of the heart, liver, and kidneys was structurally normal. The left lung was compressed. The gross appearance of the section of bowel which had been removed at operation showed thickening of the wall with effusion of blood into the wall and very friable hemorrhagic mucosa. Microscopic sections of the surgically removed bowel showed discoloration, marked venous stasis and edema and interstitial hemorrhage with early fibrous proliferation. The heart muscle showed interstitial edema. Section of the compressed lung disclosed a segment of blood clot which showed the structure of antemortem clot or thrombus.

Pathological diagnosis: Surgical specimen: small intestine showing extreme venous stasis, edema and hemorrhage, consistent with mesenteric thrombosis. Necropsy specimen: heart, showing interstitial edema of the myocardium; lung, showing embolus.

Final diagnosis: Mesenteric venous thrombosis, undetermined origin, interstitial myocardial edema and pulmonary embolus.

CASE 6: A 64-year-old man was admitted to the hospital December 15, 1946, with a complaint of severe abdominal pain and vomiting of five days' duration. The abdomen was distended, the heart was enlarged in all diameters and was fibrillating. Repeated enemas were unavailing. The leukocyte count was 8,200 with normal differential, and red blood cells numbered 2,580,000, with hemoglobin 48 per cent. Blood transfusions were given the patient on the first and second day after admission, and on the third, under spinal anesthesia, the abdomen was opened. Exploration revealed gangrenous ileum adherent to the shelf of the left sacral crest. Approximately 75 cm. of ileum was resected and an end-to-end anastomosis was done. The abdomen was closed without drainage.

Pathological examination: The wall of the removed segment of bowel was thickened, turgid and showed a hemorrhagic discoloration with some fibrin deposited on the surface.

Microscopic description: The most involved segment of bowel showed mucosal ulceration. A section of mesentery in the more involved zone showed a venous thrombosis and a mesenteric fat suffused with blood.

Pathological diagnosis: Mesenteric veni thrombosis with sub-acute inflammation and ulceration of the small intestine.

The patient was discharged January 16, 1947, in improved condition. Since discharge from the hospital, the patient has returned to his usual occupation. When last interviewed, March 27, 1947, he had regained his former weight and strength.

Final diagnosis: Chronic myocarditis with auricular fibrillation and decompensation. Mesenteric venous thrombosis, cured by operative resection.

CONCLUSION

Six cases of mesenteric vascular occlusion surgically treated, with 50 per cent mortality.

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California Cancer Commission Studies*

Chapter XV

Cancer of the Thyroid

ROBERTSON WARD, M.D., *San Francisco*

THE *prevention* and *early recognition* of cancer of the thyroid is usually the responsibility of the family doctor. Certain facts have been established which will aid in the management of patients with thyroid tumors. These facts are as follows:

1. There are no pathognomonic signs of *early* cancer of the thyroid.

2. Almost all cancers arise in *nodular* goiters.

3. Five per cent of clinically benign nodular goiters in adults prove to be malignant on pathological examination.

4. Ten to 20 per cent of multi-nodular goiters in men are found to be malignant on pathological examination.

5. Solitary tumors of the thyroid should be considered as precancerous lesions at any age, because approximately 20 per cent will be found to be cancer on pathological examination.

6. Thyroid tumors in children are particularly prone to malignant change.

7. The eventual prognosis in most cases is determined by the physician who first sees and advises the patient.

The usually recognized (textbook) signs of thyroid cancer are really signs of impending death. Rapid growth, fixation to surrounding tissues, hoarseness, tracheal pressure, dysphagia, hardness of the mass and enlargement of the surrounding lymph nodes—any combination of these usually means not only the presence of cancer but its spread past the capsule of the thyroid gland. When it is realized that the recognition of malignant change by gross and microscopic examination is, many times, extremely difficult for a trained pathologist, it will be understood that early clinical recognition in most cases is impossible. The lesson to be learned from this is not to wait for these late diagnostic signs.

In determining what cases should be suspected of malignancy there *is no more valuable point than the presence of a nodular goiter.* This eliminates from serious consideration the diffuse toxic (exophthalmic) goiter, the simple hypertrophy of adolescence and pregnancy, and in many cases the chronic indurative thyroiditis which conforms to the normal shape of a diffusely enlarged thyroid gland. As carcinoma almost never occurs in such glands the problem of cancer becomes the problem of *nodular goiter.*

The field having been narrowed to nodular goiter, the question is: "In what cases should thyroidectomy be advised?" The thyroid goes through cycles of activity and regression which are said to lead to multi-nodular thyroids in older women. Just as cancer can arise in breasts which are a site of alternate hypertrophy and involution, so can it arise in thyroids having undergone the same changes. In this type of multi-nodular goiter of long duration, any recent changes such as acceleration of the rate of growth or the advent of pressure symptoms suggesting an accelerated growth, should demand immediate surgery. The symptoms which should arouse suspicion are any of the following: A feeling of tightness, dysphagia, cough, enlarged superficial veins (which denote back pressure on the jugulars), easy fatigue of the voice, substernal distress and difficulty in breathing at night when lying on one side or the other. Opinion regarding the advisability of operation for all multiple nodular goiters will vary from the enthusiastic advocate of removing all nodular goiters to the "conservative" point of view which advises operation only when there is evidence of damage to the patient through pressure or toxic manifestations. Many thyroids on palpation reveal an irregularity of outline. This does not necessarily mean adenomatous growth. One must distinguish between physiological irregularity and adenomatous nodules. It is advisable to remove the latter, but not the former. Because there are no clinical signs of early malignancy in the thyroid it becomes necessary to use a statistical "finger of suspicion" to segregate the potential culprits from the larger group.

The statement that "almost all malignancies arise in *nodular* goiters" is true in two ways: First, many cancers arise in pre-existing nodular goiter; second, primary malignancies not arising in an adenoma tend to distort the thyroid gland into a nodular goiter. This conclusion is emphasized in order to eliminate diffuse goiter and concentrate attention upon nodular goiter.

It is advisable to outline the particular groups of nodular goiter from which the 5 per cent of malignancies arise. In which patients with nodular goiter should we advise surgical removal?

The first general group is males! In a rather large clinic series there was one cancer in each 8.3 males with nodular goiter, while in a series of private patients there was the almost unbelievable figure of one malignancy to each six male patients with nodular goiter. These figures can bear more emphasis than has been given previously. Nodular goiter will be found from six to ten times more frequently in women than in men but the likelihood of malignancy is three to four times greater in the male patient. *This should lead the physician always to advise sur-*

* Organized by the Editorial Committee of the California Cancer Commission.

gical removal in males with nodular goiter. If he does not, he is exposing his patient to one chance in six to eight of the goiter becoming malignant, if it has not already done so.

The second and larger group segregated by the statistical "finger of suspicion" are those patients, male or female, young or old, who have solitary tumors of the thyroid gland. A recent careful and painstaking analysis [3] of 96 patients in whom solitary non-toxic nodules were found clinically and at operation showed 15.6 per cent to have malignant neoplasms, and an additional 22 per cent to have benign neoplasms. Cole [1] has recently reported 24 per cent of solitary, non-toxic nodules to be malignant. Again the physician who assures such a patient that there is no cause for alarm takes an unwarranted risk with his patient's life. *Solitary adenomas should be removed.* (Figures 1 and 2.) (The plan of treatment will be outlined later.)

The third group which should fall under suspicion merely because of the presence of a tumor in the thyroid gland or laterally in aberrant tissue, is children. In children, as in males, there is no physiological explanation for nodules in the thyroid gland. As was pointed out previously, bouts of increased activity alternating with involution explain many of the multi-nodular goiters of mature women, while in children and adult males no such mechanism has been at work and the relative percentage of neoplastic nodules is thereby increased many fold. Kennedy [2] found 19.3 per cent malignancy in 62 children under 15 years of age with nodular goiter. Another series shows 40 per cent malignancy in ten children in the same age group.[4]

The seventh statement in the introduction to this presentation, that "the eventual prognosis in most cases is determined by the physician who first sees and advises the patient," is incapable of proof. However, there are certain statistical reasons for the statement. *It has been shown that an excellent prognosis can be given four out of five patients in whom malignancy is first discovered upon pathological examination; that approximately 50 per cent of those in whom malignancy is suspected at operation will be cured, and that four out of five of those in whom malignancy was suspected clinically before operation have had recurrence or died from the disease.* These statistics coupled with the author's experience of hearing the almost universal story of having been advised to "let the lump alone until it begins to bother you" have led to the belief that the family physician or *first doctor consulted may, by his advice, avoid half the tragic results encountered in the treatment of advanced cancer of the thyroid.*

TREATMENT

As in all malignancy, early recognition and adequate treatment are the solution to the problem of malignant goiter. Adequate treatment is complete surgical removal followed by x-ray therapy in cases where there is doubt as to the complete removal.

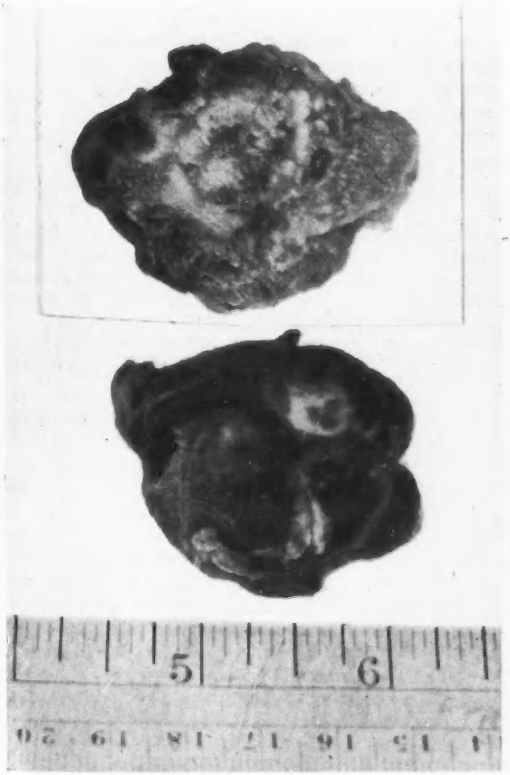

Figure 1. Malignant adenoma of six months' duration in a 23-year-old woman. Despite its small size and short duration it had infiltrated the trachea and recurrent laryngeal nerve.

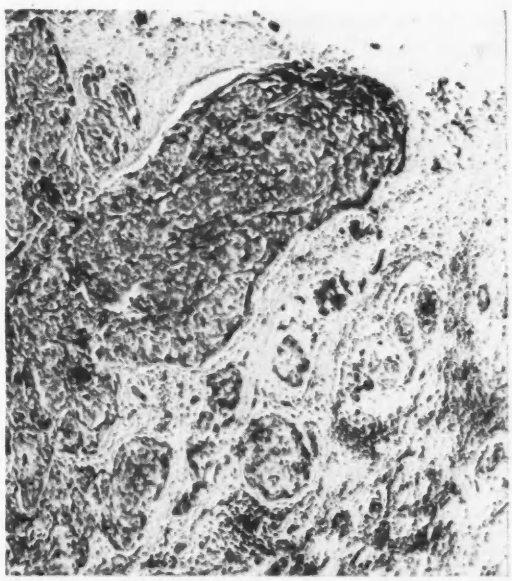

Figure 2. Photomicrograph of same tumor as shown in Figure 1. Patient is living and well six years after operation and has had two children.

Successful removal depends upon the stage of advancement at the time of operation, and this again depends upon a proper degree of suspicion on the part of the patient's medical adviser. If you or I, as medical adviser, will be armed with the seven conclusions with which this presentation was begun, we will be suspicious enough to recommend surgical removal in the following instances, and in so doing will save at least half of those otherwise doomed by the disease.

One is completely justified in advising operation for all men with nodular goiter; for all patients, male or female, with solitary tumors of the thyroid, especially if they are non-toxic; for all children with nodular goiter or aberrant thyroid nodules; and finally, for all patients who show recent increase in size, pressure symptoms or dysphagia in long-standing nodular goiters. In these groups will be found the early carcinomas. For this reason a nodule should never be enucleated, but that lobe of the thyroid containing it should be excised, leaving only the posterior capsule.

If, on the other hand, the patient demonstrates clinical signs of malignant goiter a biopsy should be performed and the type of treatment determined by the pattern and degree of malignancy of the biopsied tissue. If the pathological pattern is predominantly papillary, an attempt should be made to remove the bulk of the tumor and follow with adequate x-ray therapy. If the picture is predominantly anaplastic, one is hardly justified in recommending radical operation, and even the value of irradiation for palliation is questionable.

In association with a nodular goiter the presence of palpable enlarged lymph nodes in the neck lateral to or above the thyroid gland is almost pathognomonic of cancer. However, it has been shown that local lymphadenopathy is rare except in papillary carcinoma. Thus, although lymph node metastases are of grave import, they by no means should be considered contraindication to surgical removal of the primary lesion and metastatic nodes combined with postoperative irradiation. The papillary type of tumor from which they commonly take origin is the most responsive to roentgen therapy and the most prone to long periods of remission.

Experience of the past ten years has shown that carcinoma of the thyroid is curable if treated early or if of papillary pattern which responds well to irradiation. The old saying that "a diagnosis of malignant goiter means impending mortality" holds true only in those cases where the clinician waits for the classical clinical signs before becoming suspicious or where the pathological type of the neoplasm has shown it to be uninfluenced by surgical or x-ray therapy.

A primer of "don'ts" designed to save patients with malignant goiter would read as follows:

1. Don't wait for signs of cancer. There are none pathognomonic of early malignancy.

2. Don't forget the ever-present threat of *nodular goiter.*

3. Don't forget that your patient may be the one in 20 with an unsuspected malignancy.

4. Don't neglect to recommend operation in children or men with nodular goiter.

5. Don't neglect to advise surgical removal of solitary tumors of the thyroid.

6. Don't be guilty of telling your patient: "That lump in your neck is harmless; wait till it bothers you."

7. Don't be pessimistic about carcinoma of the thyroid if you have followed the above advice; four out of five of your patients will have a good prognosis.

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EDITORIALS

Non-Calculous Biliary Tract Disturbances

Persistent symptoms, presumably arising from the extrahepatic biliary tract and not associated with cholelithiasis, constitute a perplexing clinical problem. Cases presenting symptoms of this type have been grouped by some physicians under the designation of "stoneless gallbladder." This possesses the merit of reflecting recognition of the uselessness of cholecystectomy in the absence of gallstones, with only a few exceptions. Actual coexistence of these disturbances and cholelithiasis accounts for some of the poor results following adequate surgery for gallstones. This is well demonstrated by the fact that when common duct exploration is done on a group of cases because of persistent symptoms after cholecystectomy, those without previous stones are usually not helped, and of those who previously had stones and who have common duct stones at the time of the second operation, a few may have persistent symptoms after removal of these stones.

The term "post cholecystectomy syndrome" implies the exclusion of certain important lesions. It must be known that the cystic duct has not been converted into a "re-formed gallbladder" and that stenosis of the papilla does not exist. Also, a complete exploration of the abdomen, especially for hiatus hernia and chronic pancreatitis, should have established the absence of coexistent lesions. Neurosis may have simulated gallbladder disease or may have been associated with it and modified the result. Residual postoperative symptoms may therefore be due to obscure or functional disturbances antedating the surgery. Frequently they are suspected before surgery is contemplated. In some such instances disturbed cholesterol metabolism has been thought to be at fault, others have been classified as instances of biliary dyskinesia.

The biliary tract is extensively involved in fat metabolism. Ingested fat greatly influences the motor functions of the gallbladder. The bile contains the bile salts necessary for absorption of digested fats, and the absorbed fats are processed in the liver. Lipid fractions in the plasma such as neutral fats, fatty acids, phospholipids, cholesterol esters and free cholesterol, are all resultant substances, with important inter-relationships. Free cholesterol is excreted into the bile. Its crystals are found in nearly all gallstones, and are characteristically seen in the bile in instances of cholesterosis of the gallbladder, although the deposits in the gallbladder mucosa in cholesterosis are cholesterol esters which are not contained in bile. These esters are contained in foam cells, as in the xanthomatoses. Although the bile cholesterol content varies with the blood cholesterol, cholesterosis of the gallbladder may occur in the presence of normal blood cholesterol values. The mechanism controlling blood cholesterol levels is poorly understood. Thyroid function bears a direct relationship to the blood cholesterol level, but the mechanism is unknown. Liver disease also is a recognized factor. The blood cholesterol consists of an exogenous (ingested) fraction and an endogenous fraction. Feeding a high or low cholesterol diet to normal animals produces only a temporary rise or fall in the blood level. Apparently the enzyme systems involved have a significant capacity to compensate. In the interpretation of the innumerable blood cholesterol determinations in clinical practice, the associated presence or absence of hyperlipemia (milky serum) and xanthomatosis should be considered. Hyperlipeminia may have some relationship to right upper quadrant pain, and may be an element in the pseudo-biliary colic of portal cirrhosis. Pregnancy bears some relationship to hypercholesterolemia, and a clear relationship to cholelithiasis, but again the exact mechanisms involved, are not clear. To correlate all the foregoing, and thereby improve

our understanding of cholesterosis of the gallbladder and its dietary treatment is exceedingly difficult. Ideally, clear distinction should be drawn between a low cholesterol diet for cholesterosis and the low fat dietary management of cholecystitis, which influences motor function of the gallbladder and associated obesity. Because such a low fat diet is inherently a low cholesterol diet clinical conclusions are bereft of exactness. In therapy, the low fat, high protein diet is in consonance with recent progress. The high protein factor is added because high protein intake is the most effective natural means of promoting bile flow.

Functional motor disturbances of the common duct sphincter may be productive of pain simulating gallbladder disease ("pseudo cholecystitis"). This syndrome of biliary dyskinesia is dependent upon sphincter hypertonus producing hypertension in the biliary ducts. The secretory pressure of the liver and contractility of the gallbladder furnish the force while the unrelaxed sphincter provides the resistance. The sphincter dysfunction is apparently neurogenic. A close relationship of the sphincter to the duodenum and colon appears to exist. Disappearance of both biliary tract distress and delayed emptying of the gallbladder may follow proper management of the duodenal pre-ulcer syndrome or of an irritable colon. Perhaps the best criterion so far developed for the diagnosis of biliary dyskinesia is prompt relief by nitrite. Organic disease of the gallbladder should be excluded by cholecystography, as the sphincter spasm may be reflex from organic gallbladder disease. It is here that the admonition to avoid giving pathological significance to delayed emptying of the gallbladder has its real importance. Such delayed emptying of a radiologically normal gallbladder is indicative of motor dysfunction of the sphincter and not of cholecystitis. It is possible that the new tetra ethyl ammonium compounds will be of diagnostic value in this group of cases. The major problems arise in those instances of this disturbance where, after unwarranted cholecystectomy, the symptoms progress and nitrites lose their effectiveness, and narcotics are often employed. Surgical relief may be sought. Surgeons have met this problem by anastomosis of the common duct to the duodenum above the sphincter, by cutting the sphincter, or by dilating it. Also the common duct has been stripped to accomplish the equivalent of arterial stripping for ablation of sympathetic nerve fibers. There has been no universal adoption of any of these procedures. Recently there has been a turn toward section of the sensory fibers. These are located in the right and left greater splanchnic nerves. Novocain block of the right splanchnic is known to have given prolonged relief. It has been observed that lesions of the abdominal viscera, such as acute cholecystitis, occur without pain in hypertensive individuals who have undergone splanchnicectomy. This new field may offer much to those few patients who have become invalids from a severe form of biliary dyskinesia or post cholecystectomy syndrome.

Required Reading

Because the underlying strength of reason which alone can prevail against the pressure for state medicine must derive ultimately from a well informed medical profession, attention is called to two periodicals that recently have begun publication to keep physicians abreast of what is being done and what can be done to combat the drive both through public relations and by a strengthening of voluntary medical care plans.

One of these publications is C.M.A. Public Relations News; the other C.P.S. Progress. The former is issued bi-monthly to all C.M.A. members, and the latter is sent quarterly to some 8,600 physician members of C.P.S. The Public Relations News reports activities carried on in C.M.A.'s behalf by its public relations counsel, together with news of pertinent legislation and opinions from other fields of collateral interest. C.P.S. Progess is a source of information to doctors on membership enrollment, finances, management problems, activities of other voluntary medical care plans, the contract for care of veterans of the armed forces, and other phases of C.P.S. operations.

With a grounding in public relations and a knowledge of economic aspects of medical care now so important to doctors in efforts to keep the practice of medicine free of bureaucratic fetters, C.M.A. members owe it to themselves, to their colleagues and to their patients to absorb the information in both publications.

In calling attention to these two periodicals, it should be noted that CALIFORNIA MEDICINE hereafter will give less space to material on the subjects dealt with by them. For that reason, files of both are suggested.

A. M. A. Interim Session

As was expected, the interim session of the A.M.A. House of Delegates was primarily a business meeting. The House has been given so many added responsibilities in recent years that the period allotted for business at the Annual Session has proved to be inadequate.

At the Cleveland interim meeting, held January 5 to 8, the House met for two days and a scientific meeting followed for another two days. Scientific and technical exhibits were shown and the entire scientific program was aimed at benefiting the general practitioner. This is the first such meeting staged by the A.M.A. and editorial opinion appears to indicate a favorable reaction to the scope and purpose of the session.

The biggest boost given the general practitioner at the Cleveland meeting was the award of a gold medal to the outstanding general practitioner of 1947. This award was authorized by the A.M.A. 1947 House of Delegates, the recipient to be chosen by a screening process which took potential candidates through the Section on General Practice and the

Board of Trustees before three final names were submitted to the House of Delegates.

When the nominees came before the House of Delegates, Dr. Archer Chester Sudan of Kremmling, Colorado, emerged as the winner after digests of the nominating recommendations had been read. Dr. Sudan settled down to practice in a town of about five hundred population some twenty-two years ago. He was the only physician in the area. From 1925 on, he has covered a radius of more than eighty miles, using dog sleds or sleighs when snow covered the mountain passes and made automobile travel impossible. He has carried on a general practice with a minimum of facilities and yet has found time to attend professional meetings, keep up with scientific advances and furnish leadership in his own county and state medical associations. Two years ago he served as president of the Colorado State Medical Society and at times has overcome road-blocking snowdrifts in the upper levels of the Rocky Mountains to keep his appointments. Typical of the stories told about him is the one of the road crew returning to him a fountain pen picked up after the summer thaw, with the remark that nobody but "Doc" would have been up in that high country during the winter. The general practitioner award given Dr. Sudan was richly deserved and his many friends in California have been pleased to see him the recipient of this first of a series of annual presentations.

Thus the general practitioner is given a little larger place in the medical sun which at times has shone more brilliantly on dramatic stories of the accomplishments of specialists. Thus the "forgotten man of medicine" is granted recognition for his untiring efforts to serve anonymously but for the common good. Archer Sudan, as he was the first to point out, is a symbol of the general practitioner. May his breed continue and thrive.

Clinical-Pathological Conference

FROM STANFORD UNIVERSITY SCHOOL OF MEDICINE POSTGRADUATE REVIEW COURSE, SAN FRANCISCO HOSPITAL, SEPTEMBER 11, 1947

The patient, a 44-year-old negro laborer, was first admitted to the Lane Hospital Medical Ward on September 13, 1944, complaining of shortness of breath for seven months. He had come to San Francisco from Texas and started very heavy work in a shipyard a month before the illness began. Nocturia began along with the dyspnea, which became increasingly severe; and for two or three months before admission he had had nocturnal dyspnea and orthopnea. In late July he had headaches and dizziness on getting up. Three weeks later his legs swelled, and he came to the Medical Clinic. The urine at this time showed a trace of albumin and many red cells; the following week it was normal except for 15 to 20 leukocytes per high power field. On September 6, the electrocardiogram was reported as showing: "Sinus rhythm, rate 94, P.R.O. 15 sec. QRS 0.06 sec. Tiny Q wave in lead 3. RS-T depressed and T inverted in leads 2 and 3, T flat in lead 1. Slight right axis deviation. Precordial T deeply inverted." The patient stopped work in the shipyards, and some infected upper teeth were extracted; but there was very little decrease in the dyspnea.

Family and Past Histories gave nothing of note except a story of gonorrhea and a papular penile lesion 24 years before.

Physical examination revealed temperature 37.8 degrees C., pulse rate 108, respiration 25, and blood pressure 105/70.

The patient appeared to be well nourished and in no acute distress. Neck vein distention and liver enlargement (two finger breadths) were described by the first two examiners, but not confirmed by a third later the same day. The chest was emphysematous with a few moist rales at the bases, and rhonchi and squeaks over the entire chest. The heart was slightly enlarged, with regular rhythm. A third heart sound was audible over the lower sternum and in the epigastrium. The spleen was not felt. Slight pitting edema was present below the knees. The reflexes were normal except for absence of ankle jerks.

Laboratory: Erythrocytes numbered 5.09 m, leukocytes 8,100 with normal differential. Hemoglobin measured 14.0 gm. per cent and the sedimentation rate was 10 mm. in one hour. The urine specific gravity was 1.012 and except for a trace of albumin it was otherwise negative. Examination of the stool was negative as was the Wassermann reaction. Venous pressure measured 12.5 cm. of water and the circulation time was 24 seconds. Vital capacity was 2,000 cc. An electrocardiogram made on September 19, disclosed increase in the degree of right axis deviation. On roentgenologic examination of the chest, the heart was found not enlarged but the pulmonary artery was dilated and marked emphysema was present. Plasma proteins measured 6.9 gm. per cent.

Digitalis and salyrgan were given, with a satisfactory diuresis and decrease in venous pressure to 10 cm., and in circulation time to 17 sec. The patient was discharged on September 26, 1944, and was followed in the cardiac clinic during the next two years.

On a dosage of 0.2 gm. digitalis daily a complete A.V. block was found November 6, 1944. It disappeared with a reduction in the dose, and the following month the patient was considered fit for light work. His main complaint was of shortness of breath for ten minutes on getting up in the mornings. This was considerably helped by aminophyllin.

At times the liver was found down 2 to 3 finger breadths, and in February, 1945, it was observed that the heart rate of 88 in the sitting position decreased to 44 when the patient was recumbent.

A chest x-ray done May, 1945, revealed "marked bulging of pulmonary conus with slight enlargement of the right ventricle. Large hilar shadow due to congestion of pulmonary vessels."

At times a presystolic gallop or split first sound was audible at the xiphoid; but there was no marked change in his condition until September, 1946, when the patient became much more dyspneic and edematous. On September 25, he was readmitted to the Medical Ward.

Physical examination disclosed temperature of 37.5 degrees C., pulse of 90, respiration of 32 and blood pressure 122/80. There was moderate dyspnea and orthopnea, and a marked distention of neck veins. The costal angle was wide and a moderate degree of emphysema was present. Breath sounds were faint at the left base, with a few crackles. Cardiac dullness was increased and sounds were faint over the precordium but loud and regular in the epigastrium, where there was a gallop. The abdomen was moderately distended and the liver enlarged and tender. Slight edema of the ankles was present.

Laboratory: Erythrocytes numbered 3,800,000; hemoglobin 11.7 gm.; leukocytes numbered 10,500. Urinalysis revealed only a trace of albumin. Sedimentation rate was 16 mm. in 1 hour. Vital capacity was 1,300 cc., plasma protein measured 6.2 gm. per cent and the icteric index was 7.5.

The day after admission the patient was placed in an oxygen tent at 10 a.m. At noon he received 8.1 mg. of morphine sulphate with marked relief of dyspnea. A phlebotomy of 250 cc. was done at 3 p.m. Another 8.1 mg. of morphine sulphate administered at 5 p.m. At 8 p.m. the patient could not be aroused, and during the night respirations fell to 2 per minute,

with pulse and blood pressure not obtainable. The heart was regular, rate 72 per minute. Rales and rhonchi filled both lung fields, with dullness posteriorly, and the patient died early the next morning.

DISCUSSION BY CLINICIAN

DR. ARTHUR SELZER*: Before discussing the case I should like to make a few comments on the electrocardiogram and the chest roentgenogram of this patient, which I was permitted to review ahead of this presentation. The electrocardiograms show right axis deviation, which later became more prominent, a depression of the RS-T segments with inverted T-waves in leads 2 and 3, which is interpreted as indicative of right ventricular hypertrophy. Also noticeable are the tall P-waves, particularly in lead 2, which in my opinion may have an important bearing upon the diagnosis. The x-ray films show a normal sized cardiac shadow with a prominent pulmonary artery and heavy hilar shadows. I am impressed by the evidence of marked pulmonary emphysema, which is of great importance in the interpretation of this case. Roentgen-kymographs are shown to prove that cardiac pulsations are normal—specifically, that there are no areas of absent or reversed cardiac pulsation.

It is well to point out that more than a year has elapsed between the time the last electrocardiogram and chest roentgenogram were taken and the patient's death. We wish we had had more recent tests performed, for a new factor may have appeared in the last year of the patient's life and contributed to his death about which we have no information without recent x-rays and electrocardiograms.

The diagnostic problem presented here is a case of a middle-aged man who had cardiac and pulmonary symptoms, and who died amidst signs and symptoms of heart failure with evidence of predominant involvement of the right side of the heart, but without definite cardiac enlargement.

Considering the four common types of heart disease, we can eliminate hypertensive and luetic heart disease. It is true that normal blood pressure readings may occasionally be found in hypertensive patients during cardiac failure, but this patient has been under observation for a long time, and if he was a hypertensive, higher readings of his blood pressure would have been found at one time or another. In addition, no other findings support the diagnosis of hypertension. Lues, in its common form, affects the heart by causing aortic insufficiency, or by obstructing the coronary ostia and leading to anginal attacks. Neither was present in this case.

The diagnosis of rheumatic heart disease should be entertained here more seriously, because mitral stenosis is the commonest cause of right heart hypertrophy and failure. In mitral stenosis the characteristic diastolic murmur may be absent or overlooked, although this is seldom the case in patients observed for long periods of time, with and without cardiac failure. Against mitral stenosis in this case is the absence of cardiac enlargement, particularly that of the left auricle, the absence of auricular fibrillation, and the shape of the P-wave in the electrocardiogram, which was tall and pointed, rather than bifid, as is usually the case in mitral stenosis.

Coronary heart disease should be considered in any unexplained case of cardiac failure even in the absence of cardiac pain, for atypical, painless forms of coronary disease are not uncommon. Coronary heart disease is one of the very few conditions in which the heart may fail without marked cardiac enlargement, as has happened in this case. Also right axis deviation is commonly seen in coronary disease, either in the form of true right ventricular hypertrophy, or as a residual change from an anterior myocardial infarction (QS-wave in lead 1). There is, however, nothing in this protocol to support the diagnosis of coronary heart disease, which does not seem to me very likely even though I cannot rule it out with certainty.

Considering rarer forms of heart disease, congenital cardiac malformation should be considered in cases showing right ventricular hypertrophy. Of the few lesions compatible with survival to adulthood two come to my mind in connection with this case: (1) pulmonary stenosis with intact interventricular septum, and (2) interauricular septal defect. In the first case the x-ray appearance of the cardiac shadow is not unlike the one we saw in this case. Prominent pulmonary artery shadow is often seen, which is due to a poststenotic dilatation of the artery. Right axis deviation, too, belongs to the picture of pulmonary stenosis, with tall, prominent P-waves, as was found in this case. Yet, it is difficult to reconcile this diagnosis with the absence of a loud systolic murmur. Therefore I shall dismiss this diagnosis. An interauricular septal defect may be present without cardiac murmurs, but the absence of generalized cardiac enlargement and of wide, pulsating hilar shadows speaks against it.

In the absence of a febrile course and cardiac murmurs we do not have to entertain the diagnosis of acute or subacute bacterial endocarditis.

We have to mention in the group of diseases affecting primarily the myocardium, which in its chronic form includes so-called Fiedler's myocarditis, beriberi heart and cardiac amyloidosis. These diseases are very rare, but they should be taken into consideration in patients with chronic heart failure in whom more common causes of failure have been excluded. However, they run usually a course of progressive cardiac insufficiency, which does not as a rule extend as long as this case. They are associated with marked cardiac enlargement, and usually present bizarre and unspecific electrocardiographic patterns, so that it would not be likely to find in them typical right ventricular preponderance. Our case, then, does not fit in this group.

Finally, we come to the discussion of the group of conditions known as "cor pulmonale," or pulmonary hypertension. The existence of hypertension of the lesser circulation has been suspected for a long time, but only within the last year or two did we acquire

* Assistant Clinical Professor of Medicine.

definite proof of it by direct measurements of the pulmonary arterial pressure. We know now that the systolic pressure in the pulmonary artery in normal individuals is about 25 mm. of mercury and the diastolic pressure about 8 mm. In pulmonary hypertension the systolic pressure may exceed 100 mm. The commonest causes of pulmonary hypertension are conditions affecting the left side of the heart, namely, left ventricular failure and mitral stenosis. However, by cor pulmonale we mean primary disease of the pulmonary circulation, or primary hypertension of the lesser circulation. We have known for a long time that pulmonary vascular sclerosis, which is the pathological substrate for pulmonary hypertension is most often associated with pulmonary emphysema, pulmonary fibrosis, chronic interstitial pneumonia, pneumokoniosis, chest deformities, and, perhaps, pleural adhesions.

There is a small group of cases where pulmonary vascular sclerosis appears prominently without any demonstrable pulmonary disease, and these have been called "primary pulmonary vascular sclerosis"; but according to Brill only 20 reliably documented cases of this disease have been reported in the literature.

The causal relationship between emphysema and pulmonary hypertension is not clear. Considering the enormous reserve of the pulmonary vascular bed, only 15 to 20 per cent of which is occupied at any time, it is very doubtful whether the reduction of the capillary bed which occurs in emphysema can ever be sufficiently severe to cause pulmonary hypertension. We also have no adequate explanation for pulmonary hypertension in fibrosis of the lungs. Pulmonary hypertension associated with emphysema or fibrosis of the lungs is often accompanied by cyanosis. In some cases cyanosis and secondary polycythemia are very prominent, and these are occasionally referred to as "Ayerza's disease," although this does not signify a disease entity any more.

Returning to our case presentation, we have evidence of pulmonary emphysema and bronchitis. On first admission the patient had dyspnea, which may well have been pulmonary rather than cardiac. At that time signs of cardiac failure were rather mild. Throughout the course of the disease one can visualize the play of two factors: bronchitis and emphysema on one hand, and right sided cardiac insufficiency on the other hand. The broncho-pulmonary factor may even have outweighed the cardiac factor, for up to the terminal admission edema and increased venous pressure were not very prominent. When we add to this the absence of marked cardiac enlargement, the evidence of right ventricular hypertrophy and the tall P-waves in the electrocardiogram, the prominent pulmonary arterial shadow and the heavy hilar shadow in the x-ray—all features frequently seen in cor pulmonale—then it becomes apparent that the best diagnosis in this case is cor pulmonale, or pulmonary hypertension associated with chronic pulmonary emphysema and bronchitis, leading to right ventricular hypertrophy, strain and failure.

DR. ALVIN J. COX, JR.*: The heart in this case weighed only 350 grams. This is not a striking degree of enlargement, and no enlargement at all was present on the left side. As Doctor Selzer suspected, however, the ventricular muscle on the right side was strikingly thickened. Its thickness was nearly 1 cm. in some places, and as the ventricular chamber was considerably dilated, this thick muscle represented a marked hypertrophy of the right ventricle. The pulmonary valve orifice was 8.5 cm. in circumference, which is distinctly enlarged, and the branches of the pulmonary artery were also larger than normal. Many of the intrapulmonary branches of the artery also showed scattered atheromatous patches, which are additional evidence that there was prolonged pulmonary artery hypertension.

The lungs were voluminous and showed well developed emphysema throughout, although this was most marked in the upper lobes. This is an unusual degree of emphysema even for an older individual, and one is inclined to suspect that there was some relationship between this high degree of emphysema and the pulmonary arterial hypertension which led to hypertrophy of the right ventricle and, we believe, heart failure.

The evidence of heart failure was not as good as one might hope. There was little edema visible at autopsy, and there was no large accumulation of fluid in any of the body cavities. However, the liver, though not enlarged, showed a characteristic mottling of the cut surface indicating chronic hyperemia with atrophy of liver cells in the lobule centers. Similar patchy atrophy was present in the pancreas, where adjacent to the islands of Langerhans the cells of the pancreatic acini were considerably larger than they were at a distance from the islets. This type of focal atrophy of the pancreas is usually associated with heart failure, and I believe that the changes in the pancreas and in the liver indicate that this patient was in heart failure.

Microscopic study of the lungs showed that nearly all the small branches of the pulmonary artery had thickened walls with an increase in the number of layers of elastic tissue and fibrous thickening of the intima. This, however, does not necessarily represent the cause of the pulmonary hypertension. Similar vascular thickening occurs in cases of pulmonary hypertension when we know that the cause is beyond the lung, as in cases of mitral stenosis. It seems apparent that this kind of arterial change is a secondary phenomenon, and tells us little about the mechanism of the hypertension. This mechanism remains unknown. A role may have been played by abnormal communications with the bronchial artery which carries a higher arterial pressure, or possibly some other factors such as changes in the motility of the lungs may have been influential, but these possibilities cannot be evaluated in this case.

In summary, this was a case of pulmonary artery hypertension associated with pulmonary emphysema of a severe degree. There was hypertrophy of the heart limited to the right side—so-called cor pulmonale—and heart failure had ensued.

* Professor of Pathology.

CALIFORNIA MEDICAL ASSOCIATION

NOTICES AND REPORTS

Minutes of C.M.A. Executive Committee Meetings

Tentative Draft: Minutes of the 206th Meeting of the Executive Committee, San Francisco, January 13, 1948.

The meeting was called to order by Chairman Shipman at the Family Club at 11:30 a.m.

1. *Roll Call:*

Present were Doctors Shipman, Cline, Bruck, Garland (ex-officio) and Messrs. Whitaker and Hunton. Absent: Doctors Askey, Alesen and Wilbur (ex-officio.)

2. *California Centennial:*

Dr. Cline presented an invitation from Governor Warren for a C.M.A. representative to attend the California Youth Conference in Sacramento. It was regularly moved, seconded and voted that Dr. Frank A. MacDonald of Sacramento be asked to represent the Association on this occasion.

3. *A.M.A. Rural Health Conference:*

It was regularly moved, seconded and voted that Dr. Carroll B. Andrews, Chairman of the C.M.A. Committee on Rural Medical Service, be requested to attend a Chicago meeting of the A.M.A. Conference on Rural Medical Care on February 6 and 7, 1948, at which time Doctor Andrews plans to be in Chicago on other business.

4. *County Medical Society Election:*

Dr. Cline read a letter received from a member who complained that the election of officers in his county medical society had resulted in the assumption of office by individuals whose views were opposed to the expressed views of organized medicine; he believed that such an election should be construed as invalidating the charter of the county society. The Committee voted to place the matter on the agenda for the next Council meeting and to so notify the member.

5. *Rebates:*

There was considerable discussion of the situation regarding rebates, particularly in view of the newspaper publicity in Los Angeles and San Diego. It was moved, seconded and voted that the C.M.A. should take the following steps at this time:

1. Draft legislation for introduction in Sacramento to provide penalties for those found guilty of giving or receiving rebates.

2. Ask the Better Business Bureaus to exact pledges from their members that rebates would not be given or received.

3. Ask county medical societies to take disciplinary action against members guilty of rebate practices.

It was decided to invite legislative leaders to the next Council meeting to discuss this legislation.

(This entire action was made contingent on the approval of Doctors Askey and Alesen; this approval was given by telephone later in the day.)

Adjournment.

SIDNEY J. SHIPMAN, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

Tentative Draft: Minutes of the 207th Meeting of the Executive Committee, San Francisco, January 18, 1948.

The meeting was called to order by Chairman Shipman in the C.M.A. office at 10 a.m.

1. *Roll Call:*

Present were Doctors Shipman, Cline, Askey, Alesen, Bruck, Garland (ex-officio), Wilbur (ex-officio) and, by invitation for portion of the meeting, Dr. Glenn Cushman of San Francisco and Dr. Wilbur Bailey, C.M.A. Councilor, and for the entire meeting, Messrs. Hassard and Hunton.

2. *Association of Santa Fe Coast Line Physicians:*

Dr. Askey reported on several meetings held in Los Angeles between the C.M.A. Council's committee and representatives of the Association of Santa Fe Coast Lines Physicians. This Association has been recognized by the Santa Fe Hospital Association as bargaining agent for its physician members for purposes of the National Railway Labor Act and has expended funds for legal fees and transcripts preparatory to meetings with directors of the hospital before a federal railway mediator over requests of the physicians for adjustment of wages, working conditions and arbitration of grievances. The Association is in need of legal and financial assistance if it is to achieve the aims of its members and has requested C.M.A. officers to consider the propriety of giving such assistance.

Mr. Hassard, who met with officers of the Association of Santa Fe Coast Lines Physicians, discussed the legal situation and mentioned that litigation to determine the exact legal status of the physicians' group might be lengthy and costly.

Dr. Glenn Cushman, representing the Santa Fe physicians in the San Francisco Bay area, discussed the situation.

After full discussion it was regularly moved, seconded and voted that the moral force of the C.M.A. should be placed behind the physician members of this group, that legal and public relations counsel be instructed to give such assistance as is possible without the C.M.A. appearing officially in the case, and that legal counsel be authorized to employ assistant legal counsel for this case, if advisable.

3. *Date of Next Council Meeting:*

It was pointed out that the dates of February 28 and 29, 1948, set for the next Council meeting could not be used because of the lack of hotel facilities at that time. After discussion it was regularly moved, seconded and voted that the meeting be held in Los Angeles on February 21 and 22, 1948.

4. *Rebates:*

Discussion was held on publicity resulting from C.M.A. statements regarding rebates and it was pointed out that the Better Business Bureau of Los Angeles was anxious that legislation to prohibit rebates be introduced in the budget session of the Legislature in March, 1948, rather than awaiting the regular session in 1949. It was stated that the introduction of such legislation must follow proper legislative methods and not be forced on the Legislature as an emergency measure. It was also regularly moved, seconded and voted that the joint committee of the C.M.A. and the Board of Medical Examiners which is studying a complete rewriting of the Medical Practice Act be urged to seek inclusion in the revised act of a section setting forth that participation in rebating practices constitutes unprofessional conduct.

5. *Employee Pension Plan:*

Dr. Cline presented a new proposal made by an insurance agent for establishment of a pension plan for C.M.A. employees. He stated that this subject had been studied several years ago and dropped because of costs which were considered excessive. The new proposal provides a more modest plan at a considerably lower cost and he suggested that a new committee be named to study the matter. It was regularly moved, seconded and voted that such a committee be named, to consist of Dr. Donald Charnock as chairman, Dr. Cline and Dr. Alesen.

6. *Status of Non-Profit Hospitals:*

The Secretary reported that a recent ruling of the State Board of Equalization had resulted in some non-profit hospitals being removed from their tax-exempt status where they employed radiologists or pathologists on a basis of income higher than that paid similar physicians in state-owned hospitals. As a result of this ruling some hospitals have taken steps to cancel existing contracts with physicians on the ground their tax-exempt status may be endangered! It was regularly moved, seconded and voted that legal counsel give every assistance in this matter to the physicians whose status and working arrangements may be under question because of this ruling.

7. *Membership:*

On nomination by his county society, Dr. Earl R. McPheeters of Berkeley was elected to retired membership.

SIDNEY J. SHIPMAN, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

California Physicians' Service

Fish or Cut Bait

In a brochure published recently by the Bureau of Medical Economic Research of the American Medical Association, Frank G. Dickinson, Ph.D., Director of the Bureau, distributes the 1945 "medical" dollar as follows: Physicians, 27 cents; Hospitals, 16 cents; Dentists, 13 cents; Drugs, 23 cents; Other, 21 cents.

A footnote to his statistical study which merits special attention, defines the meaning of "*other*" as:

1. Student fees prepaying for medical care.
2. Accident and Health Insurance, net payments.
3. Mutual and Accident and Sick Benefit Associations, net payments.

In other words, various voluntary prepayment medical care agencies accounted for more than 20 per cent of every medical dollar spent in the year 1945. In 1946-1947, a period for which figures are not yet available, the proportion will be higher, for in these years the prepayment plans have had their greatest growth.

The reaction of the doctors to the well defined trend toward prepaid medical care is not uniform. Some welcome it. Some are apathetic toward it. Many deplore it. One writes as follows in the April, 1947, issue of *Medical Economics:*

"The great majority of doctors don't want prepaid medical care now any more than they wanted it a few years ago. Even fear of government control won't elicit their wholehearted cooperation in the voluntary movement. Though voluntary health insurance plans are forming throughout the U. S., I think most of them will be thrown into the discard in the near future. Most physicians don't want to practice medicine that way. They don't want to be regimented by the government or by anyone else.

Signed ————————, M.D., Washington."

Obviously the writer from Washington believes that the physician can, independently and without reference to factors other than his own wishes, define and freeze the pattern of his future practice. It is a temptation to suggest that economic factors and the wishes of his patients might have a considerable influence upon the ultimate definition of that design.

But the *reason* for the doctor's point of view (which, as he states, is shared by many) is more interesting than his prognosis of the future. Since the prepayment plans act only in a fiscal capacity for their members and do not intrude into or restrict either the patient-physician relationship or the treatment procedures involved, it is difficult to understand the use of the word "regimented" to define the real objection to them. Could the Washington doctor's real objection be to a possible reduction in fees chargeable if prepayment plans succeed in enrolling an ever larger membership among the people?

There is no reason why such an objection should not be stated openly—except perhaps, public reaction to it.

Nevertheless, if this is a real objection to the voluntary plans the physicians should do something to remove it. For if the voluntary plans fail the profession will have lost not only its one defense against governmental supervision, but it will have lost face as well. It is most unlikely that the public would forget that the voluntary plans were recommended by the profession itself as the best answer to the question of high cost medical care. With the American flair for pessimistic humor, the public can be expected to enjoy to the limit the spectacle of medicine's champion biting the dust—unhorsed by a burr under the saddle blanket.

However, even the certainty of ridicule would not justify the retention of the voluntary methods of prepayment, if the financial factor can be sustained as an objection to them. No one, least of all the American public, would deny the principle that the worker is worthy of his reward. No one would expect the doctor to serve without adequate compensation. The objective to be reached then is an agreement between the voluntary plans and the profession upon the limits of "adequate" compensation.

Such an agreement can be reached. But in view of the human and economic factors that will be the ultimate determinants, the resulting fees will be a compromise. They will not be as high as some physicians will wish. Neither will they be starvation wages. Their virtue will lie in the fact that they are a compromise reached by two parties in acknowledgment of factors beyond the control of either or both.

If the profession wishes to avoid the controls of government supervision it must set about reaching such an agreement at once. The voluntary plans cannot survive without the wholehearted support of their professional sponsors. Without agreement on fees that support will never be more than half-hearted.

It should be emphasized that there are not a half dozen alternatives to the voluntary plans. There is only one—a governmental plan. The public has declared its approval of and desire for prepaid medical care. If the profession cannot or will not supply it the government will be forced to do so, by public demand. There will be no return to "private" practice as we have known it.

The time has come to fish—or cut bait. If the profession is not interested in supporting its voluntary plans loyally and intelligently, then it should drop them—and stand by for government orders.

In Memoriam

BAYLEY, WALTER A. Died in Sawtelle, January 4, 1948, age 67, of virus pneumonia, secondary infection. Graduate of the University of Southern California School of Medicine, Los Angeles, 1905. Licensed in California in 1905. Doctor Bayley was a member of the Los Angeles County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

✤

COGGIN, CHARLES BENJAMIN. Died in Berkeley, January 10, 1948, age 40, following an emergency operation. Graduate of the College of Medical Evangelists, Loma Linda-Los Angeles, 1935. Licensed in California in 1935. Doctor Coggin was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

✤

GRAVES, JOHN HENRY. Died in San Francisco, January 9, 1948, age 80. Graduate of the Cooper Medical College, San Francisco, 1896. Licensed in California in 1897. Doctor Graves was a member of the San Francisco County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

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HENDERSON, JOSEPH JEFFERSON. Died in San Francisco, January 9, 1948, age 77. Graduate of the University of Michigan Medical School, Ann Arbor, 1891. Licensed in California in 1892. Doctor Henderson was a retired member of the San Francisco County Medical Society, and the California Medical Association.

✤

JOHNSON, CLARK MOORE. Died in San Francisco, January 18, 1948, age 49, of heart disease. Graduate of the University of California Medical School, Berkeley-San Francisco, 1924. Licensed in California in 1924. Doctor Johnson was a member of the San Francisco County Medical Society, the

California Medical Association, and a Fellow of the American Medical Association.

✤

PROBERT, WILLIAM HENRY. Died in Berkeley, January 12, 1948, age 54, of a heart attack. Graduate of the Washington University School of Medicine, St. Louis, Missouri, 1921. Licensed in California in 1932. Doctor Probert was a member of the Alameda County Medical Association, the California Medical Association, and the American Medical Association.

✤

ST. SURE, FRANK ADOLPH. Died in San Diego, January 24, 1948, age 64, of cerebral hemorrhage and hypertension. Graduate of Rush Medical College, Illinois, 1909. Licensed in California in 1925. Doctor St. Sure was a member of the San Diego County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✤

SANSUM, WILLIAM DAVID. Died in Santa Barbara, January 6, 1948, age 67, after a stroke. Graduate of Rush Medical College, Illinois, 1915. Licensed in California in 1921. Doctor Sansum was a member of the Santa Barbara County Medical Society, the California Medical Association, and a Fellow of the American Medical Association.

✤

SIEVER, ABRAHAM JOSHUA. Died in Arcadia, December 5, 1947, age 46, following a long illness. Graduate of the Washington University School of Medicine, St. Louis, Missouri, 1934. Licensed in California in 1938. Doctor Siever was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

✤

SIMPSON, BRYANT ROBERT. Died in San Diego, January 23, 1948, age 60, of cancer of the lung. Graduate of the University of Nebraska College of Medicine, Omaha, 1910. Licensed in California in 1917. Doctor Simpson was a member of the San Diego County Medical Association, the California Medical Association, and a Fellow of the American Medical Association.

Percy Tilson Magan

Born in Ireland November 13, 1867, Percy Tilson Magan came to this country at the age of 17 years. Soon afterward he entered Battle Creek College in Michigan. After his graduation he became a professor in the college and later was made dean.

Engaged in an active academic life, Percy Magan and his close friend, E. A. Sutherland, developed a strong desire to establish self-supporting medical missionary work in the neglected South. The better to qualify for the project, both men sought medical education, which they received at Vanderbilt and at the University of Tennessee where Dr. Magan was graduated cum laude in 1914. Doctors Magan and Sutherland established a medical institution in connection with the school at Madison, Tennessee. In 1915, Dr. Magan joined the College of Medical Evangelists as dean, and in 1928 he was made president, a position in which he served until his retirement and election to the position of president emeritus in 1942.

Membership in many professional societies indicated his interest in the field of medicine. He was chairman, anatomy board, southern division Depart- of Public Health, California; trustee Medical Board of Los Angeles County General Hospital; Fellow American College of Physicians; member of the American Medical Association; Society American Bacteriologists; American Hospital Association; League for Conservation of Public Health; National Tuberculosis Association; American Cancer Foundation; California Medical Association (ex-vice-president); Southern California Medical Association; Los Angeles County Medical Association (trustee).

Dr. Magan died December 16, 1947, of a heart attack following a long illness.

NEWS and NOTES

NATIONAL • STATE • COUNTY

ALAMEDA

Dr. Wendell N. Stanley, Nobel Laureate in chemistry, who will join the faculty of the University of California next July as professor of biochemistry, recently was awarded the degree of Honoris Causa, one of France's highest scientific awards, at the University of Paris. Dr. Stanley, at present at the Rockefeller Institute for Medical Research at Princeton, N. J., is to direct biochemical research on the Berkeley and San Francisco Campuses of U. C.

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Dr. Edwin H. Lennette, Alameda, who recently became the director of the Virus Laboratory, California Department of Public Health, has been appointed Lecturer in Public Health at the University of California, Berkeley.

FRESNO

Appointment of **Dr. J. J. Bocian** as full-time head of the pathological and clinical laboratories at Fresno Community Hospital has been announced by **Dr. John D. Morgan,** chairman of the board of trustees of the hospital. Dr. Bocian succeeds **Dr. C. D. Newell** who had been serving as pathologist on a part-time basis.

LOS ANGELES

Dr. Frederick Kellogg has been elected president of the Long Beach branch of the Los Angeles County Medical Association, **Dr. Seibert Pearson,** vice-president, and **Dr. Milo Ellik,** secretary-treasurer.

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Dr. Lula Talbott Ellis, Dr. George Dock and Dr. George H. Kress have been made honorary members of the Los Angeles County Medical Association in recognition of their long service to the public welfare and the advancement of the practice of medicine.

* * *

Dr. James N. De Lamater, associate professor of medicine at the University of Southern California School of Medicine, has been appointed assistant dean. He succeeds **Dr. Anson P. S. Hoyt,** who although continuing as professor of bacteriology, will now also do research in the tuberculosis control division of the U. S. Public Health Service at Barlow Sanitorium.

ORANGE

Dr. Milo K. Tedstrom has been installed as president of the Orange County Medical Association for 1948, **Dr. Thomas Rhone** as vice-president, **Dr. Llewellyn E. Wilson** as secretary-treasurer, Dr. C. C. Violett as librarian, Dr. Lawrence Whitaker as editor of the bulletin, Dr. Edward A. Miller as associate editor and Drs. John Larson, Ardeth Wightman and Harry Huffman as counselors.

SAN FRANCISO

Permanente Health Plan recently announced signing of a contract for medical care of the 7,500 civilian workers at the Navy shipyard in San Francisco. Permanente provides medical care of workers at Mare Island, Alameda Naval Air Station, Treasure Island, and the Navy supply depot at Oakland.

* * *

Dr. Lindol R. French, assistant clinical professor of medicine, Stanford University, has been appointed to the State Board of Medical Examiners by Governor Earl Warren for a term ending January 15, 1952. He succeeds **Dr. Anthony B. Diepenbrock** of San Francisco.

* * *

In recognition of research work on poliomyelitis, psittacosis, plague, tularemia and other diseases, the French Ministry of Public Health last month conferred the Order of Public Health upon **Dr. Karl Meyer,** director of the Hooper Foundation at the University of California Medical School.

* * *

The United States Navy recently awarded **Dr. J. C. Geiger,** San Francisco Director of Public Health, a certificate of appreciation for "exceptional and outstanding services rendered to the Medical Department of the Navy during the period of World War II." This was accompanied by a special citation from Rear Admiral J. P. Owen, District Medical Officer, 12th Naval District, for "meritorious services in the control of communicable diseases in the port of San Francisco."

SAN JOAQUIN

Dr. John T. Smiley has been appointed medical director of San Joaquin General Hospital to fill the position left vacant by the death of Dr. H. J. Bolinger late last year. Dr. Carl Meehan, who had been acting medical director since Dr. Bolinger's death, was named chief resident surgeon. Before his appointment to the San Joaquin County post, Dr. Smiley was chief of the Bureau of Hospital Inspection, California State Department of Public Health.

SANTA CLARA

Dr. David J. Stump, assistant professor of pathology at Columbia University, has been appointed pathologist at Santa Clara County Hospital. He replaces Dr. Houghton Gifford, who resigned in January.

* * *

Dr. William R. Duden, whose appointment as director of the Palo Alto Hospital has been announced by **Dr. Loren R. Chandler,** chairman of the hospital committee, took over his new duties February 22. Dr. Duden was formerly assistant superintendent of Peter Bent Brigham Hospital in Boston.

SANTA BARBARA

Increase in the rate of pay for resident physicians, at Santa Barbara General Hospital to $300 a month and maintenance, from $225 and maintenance, was announced recently by the County Board of Supervisors. Employment of two new residents also was reported by Dr. C. C. Hedges, the hospital's administrator. They are Dr. Louise F. Reda and Dr. Olga Siebert.

SHASTA-TRINITY

Dr. C. C. Gerrard has been installed as president of Shasta-Trinity County Medical Society for 1948, succeeding Dr. L. C. Moshier, Dr. Julius M. Kehoe continues as secretary of the Society.

SONOMA

In preparation for the scheduling of seminars on latest developments in medical knowledge which are to be held in California towns, Dr. Carroll B. Andrews, Director of Postgraduate Activities of the California Medical Association, recently made a one-week trip to Minnesota, Wisconsin, Michigan and Illinois to get information on operation of similar plans in those states. In Chicago, Dr. Andrews attended the third annual Conference on Rural Health, of which he is California state chairman.

GENERAL

Drs. Sam J. McClendon of San Diego, Harry E. Henderson of Santa Barbara and Elmer Belt of Los Angeles have been reappointed to the California State Board of Public Health by Governor Earl Warren. Dr. McClendon's appointment is for a term ending January 15, 1951, and the terms of Drs. Belt and Henderson end January 15, 1952.

* * *

General oral and pathology examinations (Part II) for all candidates will be conducted in Washington, D.C., by the American Board of Obstetrics and Gynecology from Sunday, May 16, through Saturday, May 22, 1948.

* * *

Under a new law, civilian doctors may become commissioned officers in the regular Navy, provided they meet the professional and physical qualifications. The law does away with the age limitation of 32 years and permits doctors in civilian practice to enter the Navy and be commissioned with the rank up to and including captain. Information may be obtained from the Bureau of Naval Personnel, via the Bureau of Medicine and Surgery, Navy Department, Washington, D.C.

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The American Board of Ophthalmology has scheduled Practical Examinations for 1948 in Baltimore, May 20-25, and in Chicago, October 6-9. Written qualifying tests will be held annually, probably in January of each year. Applicants for the January, 1949, written qualifying test must be filed before July 1, 1948, with the secretary, Dr. S. Judd Beach, Cape Cottage, Maine.

Osteopathic physicians now are authorized to provide out-patient treatment within certain limits to veterans with service-connected disabilities, Dr. Paul B. Magnuson, chief medical director of the Veterans Administration, announced recently. "Within the limits of practice of the healing art imposed by their respective state licenses, osteopathic physicians, when their services are requested by veterans, may be designed to provide out-patient treatment, on a fee basis, for service-connected disabilities under the same rules and regulations as govern such services by doctors of medicine," Dr. Magnuson said.

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The fourth Congress of the Pan-Pacific Surgical Association Conference will be held in Honolulu August 30 to September 13, 1948, with headquarters at the Royal Hawaiian Hotel, according to announcement by Dr. Forrest J. Pinkerton, secretary of the association.

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Declaring that there is no reason to defend "nefarious practices" of "people who got into our profession by hook or crook," Dr. Paul Magnuson, Veterans Administration medical director, announced recently that he was turning over to the American Medical Association a list of private physicians suspected of overcharging or of unfair practices in treating war veterans. He said the list was not long and consisted entirely of doctors treating out-patient veterans, but that he was asking the A.M.A. to take action.

* * *

Establishment of a number of teaching and research fellowships in the field of tuberculosis by the National Tuberculosis Association has been announced by Dr. Esmond R. Long, director of the NTA's Division of Research. The action was recommended by the executive committee of the American Trudeau Society. Annual stipends for the fellowships will range from $2,400 to $3,200 and provision will be made for laboratory fees and other incidental expenses. Applications for fellowships will be considered in the fields of pathology and bacteriology, clinical medicine, epidemiology and social and statistical research. Further information may be obtained from Dr. James E. Perkins, managing director, National Tuberculosis Association, 1790 Broadway, New York.

* * *

The area meeting of the American Academy of Pediatrics will be held at the Olympic Hotel, Seattle, September 13-15, 1948. Registration may either be made ahead of time by writing to Dr. C. G. Grulee, American Academy of Pediatrics, 636 Church Street, Evanston, Illinois, and enclosing a check for $10, or arranged for at the time of the meeting.

INFORMATION

Tissue Diagnosis Division in California Department of Health Held Unnecessary

The following resolution was adopted by the California Society of Pathologists at a meeting in December:

WHEREAS, THE PRACTICE OF PATHOLOGY, INCLUDING THE DIAGNOSIS OF TISSUES, IS THE PRACTICE OF MEDICINE AND HAS BEEN SO DESIGNATED BY THE HOUSE OF DELEGATES OF THE CALIFORNIA MEDICAL ASSOCIATION AND THE AMERICAN MEDICAL ASSOCIATION, AND

WHEREAS, PATHOLOGISTS HAVE ALWAYS SERVED PATIENTS, IRRESPECTIVE OF THEIR FINANCIAL STATUS, AS DO OTHER PHYSICIANS, AND,

WHEREAS, THE MEMBERS OF THE CALIFORNIA SOCIETY OF PATHOLOGISTS SEE NO NEED FOR ESTABLISHING A DIVISION FOR TISSUE DIAGNOSIS IN THE CALIFORNIA DEPARTMENT OF HEALTH, BE IT THEREFORE

RESOLVED, THAT THE CALIFORNIA SOCIETY OF PATHOLOGISTS PLEDGE ITS MEMBERS TO CONTINUE FREE TISSUE DIAGNOSIS IN THE CARE OF INDIGENT PATIENTS NOT CARED FOR BY PUBLIC AGENCIES IN THE VARIOUS TOWNS, CITIES AND COUNTIES OF THE STATE ON THE SAME BASIS AS DOES THE REFERRING PHYSICIAN, AND BE IT

FURTHER RESOLVED, THAT THE BOARD OF HEALTH OF THE STATE OF CALIFORNIA BE NOTIFIED OF THIS ACTION.

BOOK REVIEWS

A History of the Alameda County Medical Association

Physicians of Alameda County have several reasons for just pride in the book, "A History of the Alameda County Medical Association."

Pride in the story of the association itself. Only 14 years younger than the A.M.A., it is one of the oldest associations on the Pacific Coast. From a humble beginning it has grown into a most dynamic organization. The story of this growth is covered completely and thoroughly.

Pride in the author, Milton Henry Shutes, who has given freely of his time, from a busy otolaryngologic practice, not only to prepare this present volume but also to have written splendid books and articles on Lincoln and to edit the monthly Bulletin of the Alameda County Medical Association.

Pride in our former colleague, Frank R. Makinson, whose hobby consisted in collecting information concerning the early days of medicine in Alameda County and whose collection laid the groundwork for Dr. Shutes' effort; and lastly, pride in Dr. Makinson's widow, Alice, whose financial generosity made possible the publication of this work.

H. J. T.

A HISTORY OF THE ALAMEDA COUNTY MEDICAL ASSOCIATION. By Milton Henry Shutes, M.D. Published by the Alameda County Medical Association through the generosity of Mrs. Frank H. Makenson, 1947.

This very interesting volume is an amplification and extension of the researches and writings of Frank H. Makenson whose original book appeared in 1931.

It gives the history of the Society with the minutes, constitution and personnel of the successive organizations. There are brief sketches of many of the prominent individuals which are very interesting. Not less interesting is the contemporary medical organization history. The origin and history of the hospitals is a valuable record.

The many references with which the writer of this note is familiar are accurate and historically valuable. The volume will be interesting and valuable to all members of the medical profession who are acquainted with Alameda County and will prove interesting to all laymen for its store of local history.

The example set by Milton Henry Shutes should be followed in behalf of all county medical societies.

* * *

LABORATORY MANUAL OF MICROBIOLOGY FOR NURSES. By Gill and Culbertson. G. P. Putnams.

This manual has been carefully designed for use in a laboratory course in bacteriology for nurses. An excellent selection of experiments is included. It may be highly recommended for the specific purpose for which it was prepared. The book is much too elementary for use in the teaching of courses of microbiology for any other groups of students at the university level.

1947 YEAR BOOK OF GENERAL MEDICINE. By George F. Dick, M.D., J. Burns Amberson, M.D., George R. Minot, M.D.—(Edinburgh and London), William B. Castle, M.D., William D. Stroud, M.D., and George B. Eusterman, M.D. The Year Book Publishers, Inc., Chicago. Price $3.75.

1947 YEAR BOOK OF GENERAL THERAPEUTICS. Edited by Oscar W. Bethea, M.D., Professor of Clinical Medicine, Tulane University School of Medicine. Published by the Year Book Publishers, Inc., 304 S. Dearborn St., Chicago, Ill. Price $3.75.

These two books are valuable to the busy practitioner who has not the time—or often the inclination—to keep up with the all too voluminous literature of the all too many medical journals which are published today. They summarize and attempt to interpret the articles considered most significant by the editors in their respective fields.

The practitioner may find in them information or the clue to information he desires in the diagnosis or treatment of a difficult case. The practitioner or the teacher of medicine may also use them as sources to begin the more complete investigation of a problem in which he is interested.

For the quiz-minded individual the publishers thoughtfully have provided a list of 20 questions on the cover of each book.

If one but subscribes to the Yearbook of General Therapeutics one can toss into the trash basket faster the various throwaways of the pharmaceutical companies which would teach the practicing physician his postgraduate therapeutics to the benefit of the company's products. The therapeutic advances of 1947 are well summarized and evaluated by Dr. Oscar W. Bethea, formerly professor of Clinical Medicine at Tulane.

* * *

THE HUMAN RACE. By Emil Froeschels, Philosophical Library, New York. Price $3.00.

This small volume which presents some of the writer's philosophical concepts may be of interest to the student of philosophy. However, I am sure that the physician seeking instruction in this field can search elsewhere with greater promise of reward.

* * *

THE PRINCIPLES AND PRACTICE OF MEDICINE. By Henry A. Christian, A.M., M.D., LL.D., (Hon.) Sc.D., Hon. F.R.C.P. (Can.), F.A.C.P. Originally written by William Osler, M.D., F.R.C.P. Sixteenth Edition. D. Appleton-Century Company, Inc., New York.

This is the 16th edition of Osler's Principles and Practice of Medicine now written by Dr. Henry A. Christian. This book, in its more than 50 years of publication, has probably influenced medical thought in the United States more than any other single volume. It will probably continue to be of great influence. The present author has diligently revised the text every few years to keep up with the advances in medicine. At the same time he has attempted to retain as much as possible of the early editions. This blending results in a somewhat incongruous mixture of the old and the new.

On the new side are such innovations as the introductory history of modern medicine (by Dr. J. G. Carr) which uses the various editions of the Osler to show the developments of the period. Functional diseases of the nervous system are brought from their former location as a rear-end appendage of organic diseases of the nervous system and placed at the front of the book for every student to observe. There is a short bibliography at the end of each section in order that the reader may have ready access to o.iginal work.

On the old side are such retentions as that of "passive congestion" in diseases of the liver with the recommendation that "dry cups over the liver may be used."

The amount of bibliography at the end of different subjects is distinctly uneven. The reference space for poliomyelitis (six pages of text) is twice as large as that for tuberculosis (80 pages of text). In infectious diseases the references are given at the end of each individual entity. This is likewise true for diseases of the heart and those of the blood. On the other hand, in gastrointestinal diseases the references appear only at the end of a large section, and in renal diseases they are all lumped together. The use of Oxford Medicine as a reference text is almost too uniform. There are occasional wrong references in the index, such as the referral of emphysema in high altitude flying to page 517 instead of 545 (23); and mistakes in the text, such as the dietary prescription of 200 gm. fat, 40 of protein and 400 of carbohydrate for a high protein diet. There is spasmodic use of a telegraphic style in grammar, particularly marked in the omission of some articles when others are retained. All of this suggests hurried writing.

The book has two undesirable physical characteristics which should be mentioned. It has become so bulky that it is not easily manageable. The paper appears of such poor quality that the print is not easily read. For these the publisher should be chided.

In general, the descriptions of disease are succinct, the information on diagnosis and treatment up to date. One can still go to the Osler and find much which is missing in more wordy volumes. It can still be highly recommended.

* * *

AMIABLE AUTOCRAT—A Biography of Dr. Oliver Wendell Holmes. By Eleanor M. Tilton. Henry Schuman. Price $5.00.

The qualities which enter into good biographical writing are not always easy to define. Skill in use of the language goes of course without saying. The author must have an intimate acquaintance with the subject of his memoir, as well as with the time and place of the subject's activities. He must not fall into the distemper of which Macaulay accused Boswell. And if the general reader is to approve his work he should shun the pseudo-learned metaphysical approach, so much in vogue today, an approach which Holmes himself would surely have ridiculed. Miss Tilton can certainly not be charged with any of these failings. On the contrary, she has achieved, we believe, a biography of the first rank. Her book is a serious study but it contains just that touch of lightness which seems imperative in dealing with the Amiable Autocrat who was ever poised for flight above the heavy and the dull.

Holmes scientist and Holmes poet and writer are skillfully blended in Miss Tilton's analysis of this intriguing personality, the outstanding quality of whose mind was to process the stimuli of every sort which impinged on it and to send them scintillating forth in terms of his simple humanistic philosophy. One must be convinced from this study that Holmes, if not great, was a very good man; he exercised for years an almost unique influence not only in medicine but in literature and civic affairs, an influence which spread far beyond his local environment. Whatever his rank as a poet, he was far superior to the general run of Nineteenth Century essayist-versifiers. As a matter of fact, Dryden and Pope are at many points equalled, if not surpassed by the New England philosopher and wit who adopted so skillfully the Augustan couplet. One thinks, too, that the Doctor must have had much in common with another medical poet, almost his contemporary—George Crabbe.

Miss Tilton brings all this out; at the same time she does not work in a vacuum. A very real picture of late colonial Cambridge and Boston opens the book, and one constantly feels that through the eyes of the Autocrat one can see the scene shift down the long years of the Nineteenth Century. Harvard College and medical school, Holmes' training in Paris in the 1830's, his teaching and practice, his prodigious activity as a popular lecturer, his fight against the quacks, his philosophical novels and essays for the Atlantic, his rise to general eminence, and finally the triumph of becoming a legendary figure during one's own lifetime—all are passed in review. The medical side of the picture is done with remarkable "savoir de métier" and one wonders where Miss Tilton acquired her obvious familiarity with the laboratory as well as the consulting room. Doctor and layman can equally enjoy this book, and the author is to be thanked for a delightful and noteworthy contribution.

* * *

RECENT ADVANCES IN ENDOCRINOLOGY. By A. T. Cameron, C.M.G., M.A., D.Sc. (Edin.), F.R.I.C., F.R.S.C., Professor of Biochemistry, Faculty of Medicine University of Manitoba. The Blakiston Company.

The sixth edition of this valuable book on Endocrinology has now appeared. It remains as one of the outstanding compendiums available for the concise presentation of facts concerning physiology of the glands of internal secretion, and of present concepts concerning their various diseases.

As before, the small book is packed full of well documented and easily understood information. The old form has been preserved. Each of the glands is considered in turn, with considerable space being devoted to glandular physiology and biochemistry. The various diseases are then described, the physiology correlated, and the treatment outlined. An excellent bibliography of key references is at the end of each chapter.

The title "Recent Advances" has been justified by inserts, new references, and some deletion of the old in every chapter of the book. The section on thiouracil treatment of hyperthyroidism is the most extensive addition. It is unfortunate that the present widespread use of the less toxic propylthiouracil was not emphasized, but considering the usual lag between writing, proof reading and eventual publication, it is not surprising. New data is also included on radioactive iodine studies in thyroid physiology and in treatment, present concepts in exophthalmos, renal type of hyperparathyroidism, alloxan diabetes mellitus, the steroid hormones, the alarm reaction, experimental nephrosclerosis, prognosis in Addison's disease, metabolism of the sex hormones, the male climacteric, endocrine tumor of the gonads, carcinoma of the prostate, preparation and effects of the growth hormone and adrenocorticotropic hormone, testosterone therapy in Simmonds' disease, and presumptive hormones of the gastrointestinal tract. Turner's syndrome with dwarfism is listed under pituitary hypofunction—apparently the association with ovarian aplasia and high gonadotropin excretion was not noted in time for reclassification.

The author is a professor of biochemistry and understandably tends to emphasize fundamental physiology and biochemistry, while occasionally not giving much in detail concerning therapeutic management of the various diseases. However, fundamentals are so important in the proper understanding and management of endocrine disease, that this would seem actually to be an advantage. It has helped to keep the volume small.

This text seems at present to be the most valuable one available on this subject, and is recommended for inclusion in the library of everyone who is interested in Endocrinology, or who treats patients with endocrine diseases.

* * *

PHARMACOLOGY THERAPEUTICS AND PRESCRIPTION WRITING. By Walter Arthur Bastedo, Fifth Edition. W. B. Saunders Company, 1947.

The fifth edition of Bastedo's book is practically a new volume, as it has been completely rewritten because of many

advances in pharmacology and therapeutics. The author's guide throughout is the need of the practicing physician who uses drugs in treating sick patients, a viewpoint which is creditably maintained throughout the text without oversight of fundamentals. The book is divided into three parts.

Part I (43 pages) considers general aspects of pharmacology with a page of sage comments on the value of animal experimentation not only to pharmacology and other medical sciences but to animals themselves and human beings. He states it is the responsibility of the medical profession to educate the lay public about this matter.

Part II, the bulk of the text (732 pages), discusses the individual remedies in all essential details of pharmacological actions and therapeutic uses including the author's results in practice. New remedies considered are amino acids, blood fractions, heparin, dicumarol, curare, analeptics, antihistamines, anticonvulsants, folic acid, rutin, thiouracil and propylthiouracil, sulfonamides, penicillin, streptomycin, demerol, metopon, digitalis glycosides, antimalarials, mercurial diuretics, radioactive iodine, BAL (dithiopropanol; dimercaptopropanol) in arsenic, gold and mercury poisoning. BAL is claimed to be so efficacious in mercury poisoning that it may supplant other treatments. Poisoning from drugs and its treatment is well handled throughout. There is a brief summary of cholinergic and adrenergic effects and antagonists of autonomic drugs. The use of digitalis for prevention of cardiac hypertrophy is approved, in agreement with Christian. There are many illustrations of pharmacodynamic phenomena and of clinical results, especially side-actions. Few other books credit American pharmacologists with their original contributions as does Bastedo's.

Somewhat in contrast to the exposition of modern materia medica is the occasional inclusion of archaic and irrational drugs which seems to be a carry-over from the old empiricism, and to reflect the author's interest in pharmacy. For instance, calomel, A.B.S. pills and a considerable number of old cathartics are discussed; monobromated camphor is mentioned as a nerve sedative and gelsemium for trifacial neuralgia; for seasickness a great variety of remedies is suggested. "Sun Cholera Drops" and "Squibb's Diarrhea Mixture" are stated to contain spirit of camphor but the reader will wonder why these antiquated polypharmacal mixtures are even mentioned. Fortunately these oddities are greatly outweighed by a considerable selection of well justified materia medica.

Part III (23 pages) discusses prescription writing and dispensing of drugs in a sensible, practical manner.

The fifth edition of Bastedo's book is a compendium of remedies which can be recommended to practicing physicians as informative, interesting, and profitable reading.

MEDICAL JURISPRUDENCE

PHYSICIANS—MALPRACTICE—STANDARD OF CARE AND SKILL

PEART, BARATY & HASSARD, *San Francisco*

An action (80 A.C.A. 602) for malpractice was brought against a physician based upon the following facts: It was alleged that the defendant doctor negligently performed his services toward the plaintiff patient and that as a result thereof, a breech birth occurred during which it was alleged that the plaintiff patient suffered lacerations and tearing of the tissue, erosion of the cervix, infection of the uteral genital tract and a general impairment of her health.

Plaintiff, at the trial, testified that the defendant physician had not given her adequate personal attention during the pre-natal period and while she was giving birth to the child. The defendant physician testified that he had given her adequate care and attention and that approximately 3 per cent of the babies born are breech presentations. An expert in obstetrics was then called to the witness stand and he testified that in his opinion the defendant physician did not use the ordinary care and skill of a practicing physician in the locality in the light of practices existing at that time. However, on cross examination, this witness testified that approximately 3 per cent to 5 per cent of births are breech births and that there are at least two approved methods of practice which physicians can use in such circumstances, in one of which the attending physician does not have to attempt to turn the child. The other practice, employed by some physicians, is to turn the child by manipulation of the abdomen before the labor pains become severe. At the conclusion of the testimony, the trial court granted the motion of the defendant physician for a non suit.

The judgment of non suit was sustained by the District Court of Appeals which held that the defendant doctor, having chosen a recognized and approved method of practice, used the degree of skill and care of a practicing physician in that locality and, therefore, was not guilty of negligence. It was pointed out by the upper court that expert medical testimony was offered only on the point of whether the defendant doctor had selected and used a recognized and approved method of practice and that no expert testimony was offered on the point of whether the defendant physician had given to the patient adequate attention and treatment while she was in the hospital and, therefore, the District Court of Appeals felt that the defendant physician was not guity of negligence.

PROGRAM AND PRE-CONVENTION REPORTS

for the

CALIFORNIA MEDICAL ASSOCIATION

Seventy-seventh Annual Session

San Francisco, April 11-14, 1948

St. Francis Hotel

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HOTELS

PLENTY OF ROOMS AVAILABLE FOR THE C.M.A. 1948 ANNUAL SESSION

• Plenty of hotel rooms are available for the 1948 Annual Session, to be held April 11 to April 14 in San Francisco. Headquarters will be at the St. Francis Hotel, where all available rooms will be reserved for Officers, Delegates, Councilors and Guest Speakers. Neighboring hotels offering first-class accommodations will provide ample space for members and guests attending the session.

Listed below are hotels within a radius of a few blocks from the headquarters, in which rooms are available. Reservations in any of these hotels (except the St. Francis) may be made by writing to the San Francisco Convention & Tourist Bureau, 101 Grove Street, San Francisco, where all arrangements will be made. In writing for hotel rooms, be sure to specify the number and names of those in your party, the type and rate of accommodations required and the arrival and departure dates. It is also advisable to specify a second choice among the hotels, so that suitable arrangements may be made if the hotel of your first choice has exhausted its quota of rooms for this meeting.

A deposit of $10 per person is required to hold all reservations. Be sure to include your check when requesting hotel space.

RATES—SAN FRANCISCO HOTELS

HOTEL	SINGLE	DOUBLE	TWIN	PARLOR SUITE
CLIFT Geary at Taylor	$5.00 to 10.00	$7.00 to 10.00	$8.00 to 12.00	$20.00 to 25.00
FAIRMONT 950 Mason	6.00 to 11.00	7.00 to 12.00	7.00 to 12.00	20.00 to 26.00
MARK HOPKINS 999 California	7.00 to 9.00	10.00 to 14.00	10.00 to 14.00	20.00-25.00 to 30.00
PALACE Market and New Montgomery	5.00 up	8.00 to 11.00	9.00 to 12.00	18.00-22.00 to 35.00
*ST. FRANCIS Powell and Geary	5.00 to 10.00	7.00 to 12.00	8.00 to 14.00	18.00-20.00
SIR FRANCIS DRAKE Sutter and Powell	5.00 up	7.00 up	8.00 up	.....
BELLEVUE Geary and Taylor	4.00 to 5.00	6.00 to 7.00	7.00 to 8.00	12.00
CALIFORNIAN 450 Taylor	4.00	5.50	6.50 to 7.00	.....
CANTERBURY 750 Sutter	3.00 to 5.00	4.00 to 6.00	4.50 to 7.00	.....
STEWART 353 Geary	2.50	4.00	4.50	9.00

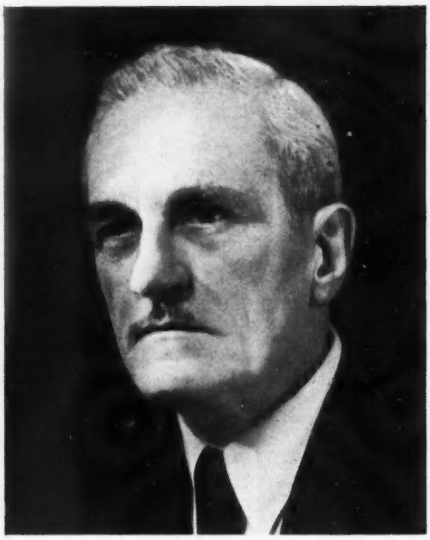
* Rooms available in the St. Francis Hotel have all been reserved for Officers, Delegates, Councilors and Guest Speakers. All those eligible under these classifications have been notified by the C.M.A. office. Please avoid delay by not requesting rooms in the St. Francis unless you occupy one of these positions.

JOHN W. CLINE
President of C.M.A.

E. VINCENT ASKEY
President-Elect

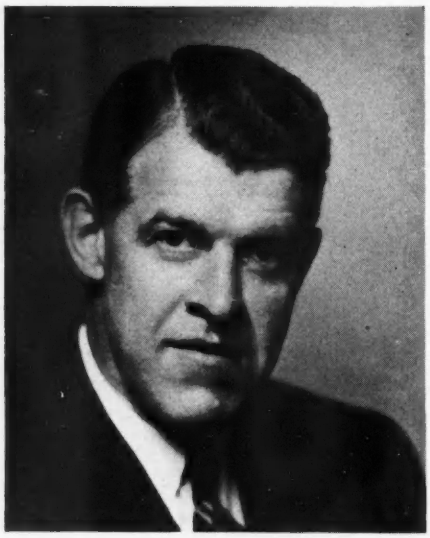
L. A. ALESEN
Speaker of the House of Delegates

Guest Speakers

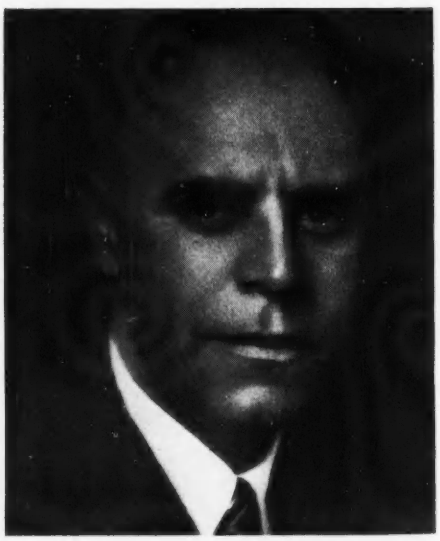


WESLEY BOURNE
Chairman, Department of Anesthesia
McGill University, Montreal, Canada

GEORGE F. LULL
Secretary, American Medical Association



RICHARD B. CATTELL
Surgeon, Lahey Clinic, Boston



HENRY E. MICHELSON
Professor of Dermatology and Syphilology
University of Minnesota Medical School

Guest Speakers

GEORGE W. THORN
Hersey Professor of the Theory and Practice of Physic, Harvard Medical School

J. WILLIAM HINTON
Associate Professor of Clinical Surgery Columbia Post-Graduate School, New York

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TOTAL DELEGATES (220)

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Rafael G. Dufficy	L. L. Robinson

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A. L. Wessels	Keith Corp

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Riverside County (2)

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Dudley Saeltzer	Ralph C. Teall

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Roswell L. Hull	E. N. Moore

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Martin W. Debenham	Frank L. A. Gerbode
G. Dan Delprat	Keene O. Haldeman
A. B. Diepenbrock	Berthel H. Henning
Frederick S. Foote	Ivan C. Heron
Henry Gibbons, III	Clyde D. Horner
Alson R. Kilgore	Charles W. Leach
Charles A. Noble, Jr.	Carleton Mathewson, Jr.
J. Marion Read	James J. McGinnis
Emmet L. Rixford	M. Laurence Montgomery
Francis Rochex	Clayton D. Mote
William L. Rogers	Thomas F. Mullen
Robert A. Scarborough	George B. Robson
Ralph E. Scovel	Wesley E. Scott
Daniel W. Sooy	Donald R. Smith
H. Brodie Stephens	Andrew B. Stockton
Robertson Ward	William A. Sumner
Helen B. Weyrauch	William W. Washburn
David A. Wood	A. Justin Williams

San Joaquin County (3)

J. Frank Doughty	C. A. Broaddus
Jack Eccleston	Ray Owens
Neill Johnson	George Wever

San Luis Obispo County (1)

H. N. Cookson	Robert O. Pearman

San Mateo County (3)

Carl Benninghoven	R. D. Borley
Stuart Lindsay	Logan Gray
A. G. Miller	Hartzell Ray

Santa Barbara County (3)

Harry C. De Vighne	H. V. Findlay
Douglas McDowell	Hugh Freidell
Alfred B. Wilcox	Delbert H. McNamara

Santa Clara County (6)

J. B. Josephson	Frederic W. Borden
Dell T. Lundquist	Burt Davis
Leslie B. Magoon	Charles A. Fernish
John Hunt Shephard	William Harder
Cletus Sullivan	Edward T. Liston
Donald R. Threlfall	John C. Wilson

Santa Cruz County (2)

P. K. Gilman, Jr.	Luther Newhall
Samuel B. Randall	Daniel D. Smith

Shasta County (1)

H. T. Hinman	Julius M. Kehoe

Siskiyou County (1)

James B. McGuire	C. C. Dickinson

Solano County (2)

H. Randall Madeley	C. C. Purviance
Felix R. Rossi, Jr.	Charles H. Widenmann

Sonoma County (2)

Carroll B. Andrews	D. C. Oakleaf
William N. Makaroff	Horace F. Sharrocks

Stanislaus County (1)

John Czatt	Paul Davis

Tehama County (1)

O. T. Wood	R. G. Frey

Tulare County (2)

Frank R. Guido	C. M. Mathias
W. A. Winn	F. L. Wiens

Ventura County (2)

A. A. Morrison	G. H. Arnold
G. K. Ridge	A. H. Stoll

Yolo County (1)

Earl H. Gray	Ray Nichols

Yuba-Sutter-Colusa County (1)

Stanley R. Parkinson	John Wesley Lindstrum

House of Delegates Meeting

1948 ANNUAL SESSION

(45th Annual Session)

The House of Delegates will meet in the Empire Room, on the second floor of the Hotel Sir Francis Drake, one block north of the Hotel St. Francis.

Speaker, L. A. ALESEN, *Los Angeles*
Vice-Speaker, DONALD CHARNOCK, *Los Angeles*
Secretary, L. HENRY GARLAND, *San Francisco*

AGENDA

FIRST MEETING

Sunday, April 11, 1948, at 6:30 p.m.

Order of Business

1. Call to order.
2. Report of Committee on Credentials, and Organization of the House of Delegates.
3. Roll call.
4. Announcement and approval of Reference Committees.
   (*a*) Committee on Credentials. (Delegates must register with the Committee.)
   (*b*) Reference Committee on the Reports of Officers and Standing Committees (Reference Committee No. 1). Note: Will consider also: Reports of County Society Secretaries.
   (*c*) Reference Committee on the Report of the Council and the Reports of the Secretary-Treasurer and Executive Secretary. (Reference Committee No. 2).
   (*d*) Reference Committee on Resolutions, Amendments to the Constitution and By-laws, and New and Miscellaneous Business. (Reference Committee No. 3.)
5. Address by President—John W. Cline.
6. Miscellaneous announcements by the speaker. (Stenographic service, to secure triplicate copies of resolutions, etc.)
7. Report of the Council—Edwin L. Bruck, Chairman.
8. Report of the Trustees of the California Medical Association—John W. Cline, President.
9. Report of the Auditing Committee—Sidney J. Shipman, Chairman.
10. Report of the Secretary—L. Henry Garland.
11. Report of the Executive Secretary—John Hunton.
12. Recess.—At 8 o'clock the House of Delegates will recess. Elected and ex-officio members of the House will then convene under the chairmanship of the President of the Board of Trustees of California Physicians' Service, to function with Board of Administrative Members of California Physicians' Service. With the adjournment of the meeting of C.P.S. Administrative members, the C.M.A. House of Delegates will convene, to act again as the House of Delegates of the California Medical Association.)

Meeting of Administrative Members of California Physicians' Service

1. Roll call.
2. Report of the President—Dr. Lowell S. Goin.
3. Report of the Secretary—Dr. Chester L. Cooley.
4. C.P.S. Administration Business Report, by the Executive Director—Mr. W. M. Bowman.
5. Appointment of Nominating Committee for Trustees and Administrative Members at Large.
6. Introduction of Resolutions.
7. Recess—for 24 hours. (Time of reconvening will be stated.)
8. Consideration of the Report of the Nominating Committee.
9. Consideration of resolutions.
10. New business.

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13. Report of the Editor—Dwight L. Wilbur.
14. Reports of District Councilors.
15. Reports of Councilors-at-large.
16. Report of Legal Counsel—Peart, Baraty & Hassard.
17. Reports of Standing and Special Committees:

A. Standing Committees:

(a) Executive Committee—Sidney J. Shipman.
(*b*) Committee on Associated Societies and Technical Groups—Peter Blong.
(*c*) Committee on Audits—Sidney J. Shipman.
(*d*) Committee on Health and Public Instruction—George M. Uhl.
(*e*) Committee on History and Obituaries—Morton R. Gibbons, Sr.
(*f*) Committee on Hospitals, Dispensaries, and Clinics—Carroll B. Andrews.
(g) Committee on Industrial Practice — Donald Cass.
(*h*) Committee on Medical Defense—Nelson Howard.
(*i*) Committee on Medical Economics—H. Gordon MacLean.
(*j*) Committee on Medical Education and Medical Institutions—B. O. Raulston.
(*k*) Committee on Organization and Membership—Carl L. Mulfinger.
(*l*) Committee on Postgraduate Activities—John C. Ruddock.
(*m*) Committee on Publications—George W. Walker.
(*n*) Committee on Public Policy and Legislation—Dwight H. Murray.
(*o*) Committee on Scientific Work (Annual Session)—L. Henry Garland.
(*p*) Cancer Commission—Lyell C. Kinney.
(*q*) Editorial Board—Dwight L. Wilbur.

B. Special Committees:

(*a*) Delegates to the American Medical Association—John W. Cline.
(*b*) Physicians' Benevolence Committee—Axcel E. Anderson.
(*c*) Advisory Planning Committee—John Hunton.
(*d*) Committee on Redistricting Councilor Districts—G. Dan Delprat.
(*e*) Committee on Revision of Constitution and By-Laws—Sam J. McClendon.

18. Old and Unfinished Business.
   (*a*) Constitutional Amendments.
19. New Business.

SECOND MEETING

Tuesday, April 13, at 6:30 p.m.

Order of Business

1. Call to order.
2. Supplemental Report of Credentials Committee.
3. Roll call.
4. Secretary's announcement of Council's selection of place for the 1949 annual session.
5. Election of Officers:
   (*a*) *President-Elect.*
   (*b*) *Speaker.*
   (*c*) *Vice-Speaker.*
   (*d*) *District Councilors* (three-year term):*
   Second District—Jay J. Crane, Los Angeles (term expiring).
   Second District—Los Angeles County.
   Fifth District—R. Stanley Kneeshaw, San Jose (term expiring).
   Fifth District—Monterey, San Benito, San Mateo, Santa Clara and Santa Cruz Counties.
   Eighth District—Frank A. MacDonald, Sacramento (term expiring).
   Eighth District—Alpine, Amador, Butte, Colusa, Eldorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo and Yuba Counties.
   (*e*) *Councilors-at-Large (three-year term):*
   (Note.—*Each vacancy among Councilors-at-Large, Delegates and Alternates is considered in turn. Each vacancy is voted on separately.)*
   Walter S. Cherry, Rialto (term expiring).
   H. Gordon MacLean, Oakland (term expiring).
   Eugene F. Hoffman, Los Angeles (unexpired term to expire in 1949. Incumbent holding office through Council appointment).
   (*f*) *Delegates to the American Medical Association:*
   Delegates are elected for two calendar years. At this session of the C.M.A. House of Delegates, terms of Delegates elected for calendar years 1949-1950 will expire on December 31, 1950.

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* See footnote, page 197.

For terms: January 1, 1949-December 31, 1950
Incumbents

(*a*) H. Gordon MacLean, Oakland (term expiring).
(*b*) E. Vincent Askey, Los Angeles (term expiring).
(*c*) John W. Cline, San Francisco (term expiring).
(*d*) Donald Cass, Los Angeles (term expiring).
(*e*) Ralph B. Eusden, Long Beach (term expiring).

(*g*) *Alternates to the American Medical Association:*

(*a*) Leopold H. Fraser, Richmond (Alternate to H. Gordon MacLean).
(*b*) William Benbow Thompson, Los Angeles (Alternate to E. Vincent Askey).
(*c*) C. Kelly Canelo, San Jose (Alternate to John W. Cline).
(*d*) Alternate to Donald Cass—Carl L. Mulfinger incumbent through Council appointment.
(*e*) Elizabeth Mason-Hohl, Los Angeles (Alternate to Ralph B. Eusden).
(*f*) Alternate to John W. Green—Frank A. MacDonald incumbent through Council appointment.
(For term ending December 31, 1949.)

6. Announcement by Secretary.
Council's nominations of Members of Standing Committees. (For approval by the House of Delegates.)
7. Reports of Reference Committees:
(*a*) Report of Reference Committee Number 1, on "Reports of Officers and Standing Committees."
(*b*) Report of Reference Committee Number 2, on "Report of the Council, and Reports of Secretary-Treasurer, and Executive Secretary."
(*c*) Report of Reference Committee Number 3, on "Resolutions, Amendments to the Constitution and By-Laws, and New and Miscellaneous Business."
8. Adoption of budget for 1948-1949 fiscal year.
9. Setting of Association dues for calendar year 1949.
10. Unfinished Business.
11. New Business.
12. Presentation of Officers:
President
President-Elect
Speaker
Vice-Speaker
13. Presentation of Certificate to Retiring President—John W. Cline.
14. Approval of Minutes. (Committee to edit.)
15. Adjournment.

LEWIS A. ALESEN, *Speaker*
L. HENRY GARLAND, *Secretary*

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* *Procedure of nomination of District Councilors is outlined in paragraph 3 of Article VII, Section 1, of C.M.A. constitution, adopted on May 8, 1940:*

The nine district Councilors shall be elected as follows:

Prior to the time set for election of district Councilors, the delegates of each Councilor district for which a councilorship is about to become vacant, shall submit in writing to the Secretary-Treasurer the names of one or more nominees to fill the said vacancy.

The Secretary-Treasurer shall transmit the names of such nominee or nominees so submitted to him to the House of Delegates on or before the time set for the election.

A vote shall be taken by the House of Delegates upon the nominee or nominees so submitted and, in the event that only one nominee has been submitted, the House of Delegates may, by a majority vote, either elect or refuse to elect said nominee.

If the House of Delegates shall reject the sole nominee of the delegates from the councilorship district concerned, then said delegates must immediately thereafter submit an additional nominee or nominees and the House shall proceed to vote thereon; if there is but one nominee, the House may elect or reject.

If, after such time as the Speaker may allow, delegates within such councilor district fail to submit an additional nominee or nominees, the House of Delegates may then proceed to make nominations from the floor of the House and a vote shall then be taken by the House of Delegates to determine who shall be elected to the vacant councilorship.

All nominees for district councilorships must be members in good standing, residing within the district in which the vacancy exists.

Proposed Amendments to C. M. A. Constitution

Second publication of six resolutions to amend the Constitution of the California Medical Association is made herewith. The resolutions were introduced in the House of Delegates at the 1947 annual meeting and are to be voted upon at the 1948 annual meeting.

Proposed constitutional amendment relative to annual assessment of dues

RESOLVED, That Section 1 of Article XI of the Constitution of this Association, California Medical Association, be and the same hereby is amended by adding to said section paragraph headings, by adding to said section a provision that the House of Delegates shall have power to reduce the annual per capita assessment of dues upon certain conditions, and by recasting said section to read as follows: "Section 1.—Annual Assessment of Dues—Other Sources of Funds—Appropriations.

"(a) Annual Dues: Funds shall be raised by equal annual per capita assessment of dues from the active and associate members, assessment of dues upon the associate members to be one-half of that upon the active members. The amount of the assessments shall be fixed by the House of Delegates by a majority vote of the members present and voting.

"(b) Waiver of Dues—War Service: Annual dues may be reduced or waived with respect to those members serving in the armed forces of the United States during the whole or any part of any year, and the Council may in its discretion refund in whole or in part from the funds of the Association dues paid in 1940 or in 1941 by or on behalf of active members if such members were at the time actually in the service of the armed forces of the United States.

"(c) Reduction of Dues—Special Cases: The House of Delegates, in fixing the amount of annual dues for any year, may at the same time provide for a reduction in annual dues for such year for those active members of the Association who, during the year, are ill or injured and wholly unable to engage in the practice of medicine or other gainful employment for a period of three or more consecutive months, or for those active members who engage in postgraduate work during the year, or for those active members who graduated from medical school less than five years prior to the first day of January in the year concerned. The House of Delegates, in providing for reduction of dues for any or all of the foregoing classes of active members, may designate the amount of the reduction and the procedure whereby such reduction may be obtained by an active member entitled thereto, or may delegate to the Council the power to fix the amount of the reduction and the procedure for obtaining same.

"(d) Other Sources of Funds—Special Assessments: Funds may also be raised by any of the following methods: I. publications of the Association; II. voluntary contributions; III. bequests, legacies, devises, and gifts; IV. special assessments levied by the House of Delegates; and V. in any other manner approved by the House of Delegates. In the event that the House of Delegates levies any special or other assessment other than the annual assessment of dues, it may, in the resolution levying the assessment, fix and determine the time within which such assessment must be paid, the class or classes of members of the Association upon whom it is levied, and the penalty, if any, including forfeiture or suspension of membership in this Association or the component county medical society, or both, to result from nonpayment thereof within the time prescribed.

"(e) Appropriations of Funds: Any resolution passed and adopted by the House of Delegates at any regular or special session thereof, which provides for or contemplates the appropriation or expenditures of the sum of more than $1,000, shall not be effective for any purpose unless and until ap-

proved by the Council. All appropriations, regardless of amount, approved and made by the Council, shall, if expended, be reported to the House of Delegates at its next annual session, and any unexpended portion of any thereof shall be included in the annual budget.

"(f) Physicians' Benevolence Fund: At least $1.00 out of the annual dues paid by each member of the Association shall be allocated to the Physicians' Benevolence Fund and shall only be used for purposes set forth in the By-Laws."

Proposed constitutional amendment relative to life membership

RESOLVED, That Section 1 (e) of Article IV of the Constitution of this Association, California Medical Association, be amended to read as follows: "(e) Life Members.

"Qualifications: Life members of the California Medical Association may be elected by the Council on the recommendation of any component county society from those active members thereof who (1) have been active members of this Association continuously for a period of twenty (20) years or more and are more than fifty (50) but less than sixty (60) years of age and have tendered to this Association a life membership fee of one hundred fifty dollars ($150.00) or such other sum as the House of Delegates may from time to time determine; or (2) have been active members of this Association continuously for twenty-five (25) years or more and are more than sixty (60) but less than sixty-five (65) years of age and have tendered to this Association a life membership fee of one hundred dollars ($100.00) or such other sum as the House of Delegates may from time to time determine; or (3) have been active members of this Association continuously for a period of twenty-five (25) years or more, are more than sixty-five (65) but less than seventy (70) years of age and have tendered to this Association a life membership fee of fifty dollars ($50.00) or such other sum as the House of Delegates may from time to time determine; or (4) have been active members of this Association continuously for twenty-five (25) years or more and are more than seventy (70) years of age. Those active members falling within Classification 4 need not be recommended by any component county society but are eligible to life membership on direct application to the Council. The Council may not elect to life membership any active member whose membership has not been continuous or who has ever been censured, suspended or expelled from the American Medical Association, this Association, any state medical association which is a constituent unit of the American Medical Association, or any county medical society which is a component part of this Association or a unit of any other state medical association.

"Obligations and Rights: Life members shall not pay dues and shall not be liable for assessments of any kind or nature. If active membership in good standing is maintained in his component county society, each life member shall have the right to vote, to hold office, and shall have all other rights and privileges of the Association. If active membership in his component county society is not maintained, the rights and privileges of a life member shall be those of a retired member."

Proposed constitutional amendment relative to rights of active members

Subdivision (a) of Section 1 of Article IV of the Constitution of this Association, California Medical Association, is hereby amended by adding to the end of the second paragraph of said subdivision (a) the following: "except that an active member who is gainfully employed or retained, whether compensated by a salary, commission, retainer or other method, by this Association or by any component county society or by any corporation, association or organization controlled by this Association or any component county society, may not hold office in this Association or be a member of the House of Delegates during such time as he is so gainfully employed or retained."

So that the second paragraph of said subdivision (a) of Section 1 of Article IV of the Constitution shall hereafter read as follows: "Rights: An active member shall have the right of suffrage and all other rights and privileges of the Association; except that an active member who is gainfully employed or retained, whether compensated by a salary, commission, retainer or other method, by this Association or by any component county society or by any corporation, association or organization controlled by this Association or any component county society, may not hold office in this Association or be a member of the House of Delegates during such time as he is so gainfully employed or retained."

Proposed amendment to the constitution relative to additional classes of membership

RESOLVED, That Article IV, Section 1 of the Constitution of this Association, California Medical Association, is hereby amended by adding a new subdivision to read as follows:

"(f) Additional Classes of Membership: The House of Delegates may, from time to time, establish special and limited classes of membership in this Association for internes, junior and senior residents, or house officers, practicing in hospitals in this state. In establishing such special membership for internes, junior and senior residents, or house officers, the House of Delegates may determine the qualifications, duration and privileges of such membership. Unless the House of Delegates determines to the contrary, such special members shall not pay dues. The House of Delegates may also from time to time provide for affiliation with the California Medical Association, on an affiliate basis, of undergraduate medical students attending medical schools in this state. Membership obtained under this subsection (f) shall not carry with it the right to vote or hold office."

Proposed amendment to the constitution relative to inactive members

RESOLVED, That section (f) be added to Article IV to read as follows: (f) Inactive Members: Qualifications—The Council may elect as inactive members, on recommendation of the component county societies concerned, any member in good standing who leaves his practice for a period of six or more months to engage in bona fide postgraduate study, or who leaves his practice by reason of protracted illness and for whom payment of dues would be a hardship. Obligations and Rights—Inactive members shall not pay dues and shall not have the right to vote or to hold office, or if holding an office during the period away from practice shall relinquish that office.

Proposed constitutional amendment relative to dues of members in the armed services

RESOLVED, That the Constitution of the California Medical Association shall be amended: By changing Article XI, Section 1, Paragraph 2, thereof, to read as follows: "Annual dues may be reduced or waived with respect to those members serving in the armed forces of the United States during the whole or any part of any year, and in respect to any member for any cause, upon the recommendation of the Council or Executive Board or body of the respective member's component county medical association or society, and"

SCIENTIFIC ASSEMBLIES

General Meetings

First General Meeting

Sunday, April 11, 10:00 A.M., Curran Theater

Chairman, John W. Cline, M.D., *President*

10:00—Address of Welcome—Robertson Ward, M.D., President, San Francisco County Medical Society.

10:05—Greetings from the Woman's Auxiliary—Mrs. Norman Morgan, President, Woman's Auxiliary to the California Medical Association.

10:15—Address of the President—John W. Cline, M.D., San Francisco.

10:25—What Is Being Done About the Ten Point Program—George F. Lull, M.D., Chicago, Illinois.

11:05—Carcinoma of the Rectum—Richard B. Cattell, M.D., Boston, Massachusetts.

11:35—End Result of Thorocolumbar Sympathectomy in Advanced Essential Hypertension—J. William Hinton, M.D., New York, N. Y.

A discussion of indications and contra-indications for operations in advanced cases of essential hypertension. This will be based on a review of approximately 500 patients operated upon during the past six years.

Second General Meeting

Tuesday, April 13, 9:00 A.M., Curran Theater

Chairman: George B. Robson, M.D., San Francisco
A. Morse Bowles, M.D., Santa Rosa.

9:00—The Pathogenesis of Cardiac Edema—Eaton MacKay, M.D., La Jolla.

Correlation of the renal factors involved in the occurrence of congestive heart failure; renal blood flow, glomerular filtration and tubular absorption of sodium and water. Influence of the posterior pituitary anti-diuretic hormone. Consideration of therapy in the light of these factors.

9:30—At the Head of the Table—Wesley Bourne, M.D., Montreal, Canada.

10:00—Diagnosis and Treatment of Adrenal Insufficiency—George W. Thorn, M.D., Boston, Massachusetts.

CLINICAL-PATHOLOGICAL CONFERENCE

10:30—Case No. 1: Pathologist James E. Kahler, M.D., Los Angeles. Clinician J. William Hinton, M.D., New York, N. Y.

11:00—Case No. 2: Pathologist Helmuth Sprinz, M.D., Major (MC) U.S.A. Clinician George W. Thorn, M.D., Boston, Massachusetts.

11:30—Case No. 3: Pathologist Howard A. Ball, M.D., San Diego. Clinician William S. McCann, M.D., Rochester, N. Y.

Third General Meeting

Wednesday, April 14, 9:00 A.M., Curran Theater

WHAT'S NEW IN MEDICINE

Chairman: John W. Cline, M.D., *President*

9:00—Anesthesiology—Wesley Bourne, M.D., Montreal, Canada.

9:15—Dermatology—Henry Michelson, M.D., Minneapolis, Minnesota.

9:30—Infectious Disease—Albert Bower, M.D., Los Angeles.

9:40—Pulmonary Disease—William M. M. Kirby, M.D., San Francisco.

9:50—Endocrinology—George W. Thorn, M.D., Boston, Massachusetts.

10:05—Gastro-Enterology—Garnett Cheney, M.D., San Francisco.

10:15—Recess.

10:25—Surgery of Cancer—Richard B. Cattell, M.D., Boston, Massachusetts.

10:40—Use of Anti-Coagulants in Surgery—J. William Hinton, M.D., New York, N. Y.

10:55—Clinical Pathology—Alvin G. Foord, M.D., Pasadena.

11:05—Clinical Radiology—Wilbur Bailey, M.D., Los Angeles.

11:15—Questions in writing to the Speakers.

Special Meetings

POSTGRADUATE TRAINING AND MEDICAL ECONOMICS

Wednesday, April 14, 2:00 P.M., Empire Room, Sir Francis Drake Hotel

Chairman: E. Vincent Askey, M.D., Los Angeles

2:00—Postgraduate Medical Training: Report on National and Certain State Developments—George F. Lull, M.D., Chicago.

2:30—Practicing Physicians and a Social Outlook on Health—Howard F. West, M.D., Los Angeles.

2:50—A State Medical School Program for Integrated Postgraduate Training and Improved Medical Care—Ward Darley, M.D., Denver, Colorado.

3:20—The New C.M.A. Postgraduate Program as Viewed by a Physician in General Practice—Carroll B. Andrews, M.D., Sonoma.

Comprehensive material should be available to physicians gathered from outlying sections. Digests of important advances in general medicine and surgery should be presented. Lecturers from medical schools and hospitals should conduct seminars, practical discussions, and clinics. Local physicians should participate actively in the presentation of cases and discussions.

3:40—Shortcomings of Medical Practice, Especially from an Internist's Viewpoint—George B. Robson, M.D., San Francisco.

Advances in medicine have added considerably to the cost of present day medical care. Many health insurance schemes have been designed to meet this increased cost. None of these schemes have adequately covered the field of internal medicine. Suggestions will be made for more equitable systems of health insurance.

4:00—A Positive Program for Health Care—Lowell S. Goin, M.D., Los Angeles.

Section Meetings

SECTION ON GENERAL MEDICINE

Howard O. Dennis, M.D., Beverly Hills, *Chairman*
George B. Robson, M.D., San Francisco, *Secretary*
Lewis T. Bullock, M.D., Los Angeles, *Assistant Secretary*

HOWARD O. DENNIS
Chairman, General Medicine

GEORGE B. ROBSON
Secretary, General Medicine

Sunday, April 11, 2:00 P.M., Curran Theater

Joint Meeting with General Practice, General Surgery, Obstetrics and Gynecology, and Public Health

PANEL DISCUSSION ON THE COMPLICATIONS OF PREGNANCY

T. Floyd Bell, M.D., Oakland, Chairman
Moderators: Herbert Traut, M.D., San Francisco, and Charles McLennan, M.D., San Francisco

2:00—Physiological Changes in the Genito-Urinary Tract During Pregnancy—Daniel Morton, M.D., San Francisco.

2:20—Heart Disease Complicated by Pregnancy—John J. Sampson, M.D., San Francisco.

Known changes in circulatory dynamics attendant on pregnancy and labor are presented. These factors are considered in establishing criteria of candidacy of cardiac patients for pregnancy and pelvic or Caesarean delivery. Impairment of cardiac efficiency and maternal and child survival are statistically analyzed in determining these criteria.

2:40—Diabetes Complicated by Pregnancy—Percival A. Gray, M.D., Santa Barbara.

The outlook for the pregnant diabetic is fairly good. In our experience Caesarean section in primiparae has been uniformly successful. Hormonal therapy has not yet completely replaced older procedures. Neither maternal acidosis nor fetal hypoglycemia have been problems. Control of diabetes has been based on blood sugar determinations rather than urinalyses.

3:00—Recess.

3:10—Pregnancy in Patients with Glomerular Nephritis —Thomas Addis, M.D., San Francisco, by invitation.

For the past five years a group of patients with glomerular nephritis have been studied during pregnancy by methods that reveal change in the intensity and extent of their renal lesion. No consistent change has been observed. It is concluded that for patients in the latent stage of glomerular nephritis pregnancy is not detrimental.

3:30—The Problem of German Measles Complicated by Pregnancy—Harry F. Dietrich, M.D., Beverly Hills.

Abnormalities identical with genetically inherited congenital anomalies can be reproduced in the experimental animal with a variety of noxii. Rubella virus is one such agent in the pregnant human, and so, introduced at the proper time, can cause single and multiple congenital anomalies.

3:50—General Surgical Complications of Pregnancy—Ray B. McCarty, M.D., Riverside, California.

Surgical complications during pregnancy may present formidable problems in diagnosis, and/or treatment. As experience with these complications has accumulated along with a better surgical technique, improvement in anesthetics and the method of their administration, and proper preoperative and postoperative consideration of the pregnancy, many former risks to the mother and fetus have been removed. The common general surgical complications will be considered.

4:10—Questions in writing to the speakers.

Monday, April 12, 9:00 A.M., Curran Theater

Joint Meeting with Sections on General Surgery, Pathology and Bacteriology, and Radiology

SYMPOSIUM ON THYROID DISEASES

Moderator: Mayo H. Soley, M.D., San Francisco

9:00—Pathology of Nodular Goiter—Stuart Lindsay, M.D., San Mateo.

The gross and microscopic patterns of nodular goiter will be presented. The relationship between secondary epithelial proliferation in involuntary nodules, and benign and malignant nodules of the thyroid gland will be discussed.

9:20—Therapeutic Problems of Non-Toxic Nodular Goiter—Morris E. Dailey, M.D., San Francisco.

The experience of the group associated with the Thyroid Clinic has clarified some of the problems concerned with the handling of patients with non-toxic nodular goiter. Points to

be covered include: The differential diagnosis of involuntary and neoplastic goiters, therapy, and results. The frequency of malignant tumors will be emphasized, together with some features that make this type of neoplasm unique.

9:40—**Present Therapeutic Approach to Graves Disease**—George W. Thorn, M.D., Boston, Mass.

10:10—**Antithyroid Drugs**—Paul Starr, M.D., Pasadena.

Chemical derivatives of thiourea (such as propylthiouracil) block the formation of thyroid hormone in the secreting epithelium of the thyroid at a variable rate in different individuals. If progressively increased in daily dosage an amount can be found which will produce a progressive depression of the protein bound (hormone) blood iodine and gradually reduce the hyperthyroidism. This treatment may be given in preparation for operation or to cases requiring indefinite medical management.

10:30—**Intermission.**

10:40—**Surgical Treatment of Hyperthyroidism**—Richard B. Cattell, M.D., Boston, Mass.

Subtotal thyroidectomy has been accepted for many years as the best treatment for hyperthyroidism. The satisfactory results obtained are dependent upon many factors—proper preparation for operation, good anesthesia and a properly carried out surgical procedure to avoid complications. Special emphasis will be placed upon surgical methods of avoiding injuries to the parathyroids and recurrent laryngeal nerves.

A real advance in the surgical management of hyperthyroidism has been made possible by the proper use of the antithyroid drugs in the preparation of patients for operation. Over 1,200 patients have been so prepared at the Lahey Clinic and operated upon, with but one death. Multiple stage operations are no longer necessary. The period of hospitalization has been reduced to about six days. Results from and complications of subtotal thyroidectomy will be mentioned.

11:10—**Radioactive Iodine**—Myron Prinzmetal, M.D., Beverly Hills.

Radioactive iodine for the treatment of Graves Disease has proven to be highly successful. The percentage of "cures" has been very high in our hands. No untoward reactions have occurred. In many instances, radioactive iodine has distinct advantages over other methods of treatment. In serious cases, with such complications as advanced heart failure, muscular dystrophy, and psychosis, radioactive iodine has been lifesaving.

11:30—**Questions in writing to the Speakers.**

Monday, April 12, 1:40 P.M., Curran Theater

Joint Meeting with Urology, General Practice and Pediatrics

1:40—**Demonstration: Passive Transfer—Its Use in the Diagnosis of Allergic Conditions**—Julian Cohn, M.D., Los Angeles.

Color motion picture showing the advances in the study of allergy by means of skin testing antibodies. Outline of technique and administration. Limited indications for its use.

SYMPOSIUM ON KIDNEY DISEASES

Moderator: Thomas Addis, M.D., San Francisco, by invitation

2:00—**Renal Physiology**—Ralph E. Homann, M.D., Los Angeles.

A brief review of the present concepts of renal physiology. A discussion in terms of altered physiology of some abnormalities occurring in kidney disease.

2:20—**Significance of Albuminuria**—David A. Rytand, M.D., San Francisco.

"Proteinuria" is preferable to "albuminuria," for not only albumin but both normal and abnormal globulins appear in urine. While proteinuria is usually the result of renal lesion, this need not always be the case. The quality and quantity of protein in the urine are to be considered in therapy.

2:40—**Nephrosis**—John D. Lyttle, M.D., Los Angeles.

The natural history of nephrosis in children is discussed on the basis of a critical review of 80 cases studied over a period of 18 years. Charts are shown which illustrate the course in uncomplicated cases and in cases complicated by infection or nephritis or both.

3:00—**Metabolic Effects of Renal Insufficiency in Children**—Francis Scott Smyth, M.D., San Francisco.

The kidney has an important function in the selective elimination of certain metabolites. Glomerular-filtration and tubular-resorption is able to maintain body fluid equilibrium over a fairly wide variety of conditions. However, with damage from disease or toxic substances, this function may be altered with far-reaching changes in the metabolic picture. Particular attention is given to the acid-base metabolism and the effect of phosphate retention in nephritis.

3:20—**Intermission.**

3:30—**Chemotherapy of Renal Infections**—Donald A. Charnock, M.D., Los Angeles.

Chemotherapy has passed through several phases—bacteriotropic, then bacteriostatic. We are rapidly passing into the bactericidal phase. The development of the antibiotics opens the most potent attack on uncomplicated renal infection.

3:50—**Treatment of Renal Insufficiency**—George W. Thorn, M.D., Boston, Mass.

4:30—**Questions in writing to the Speakers.**

Tuesday, April 13, 1:15 P.M., Empire Room, Sir Francis Drake Hotel

1:15—**Demonstration—Primary Carcinoma of the Lung—Cytologic Study of Sputum and Bronchial Secretions**—Seymour M. Farber, M.D., San Francisco, John K. Frost, M.D., San Francisco, by invitation, and Miriam Duschkin, B.A., San Francisco, by invitation.

Recent advances in the identification of cellular elements of bronchial secretions have been made possible through the use of the Papanicolaou and Traut smear technique. This demonstration presents the cytologic criteria for diagnosis of malignant cells found in the sputum and bronchial secretions of patients with primary carcinoma of the lung.

2:00—**Business Meeting**, Howard O. Dennis, M.D., Los Angeles, presiding.

SYMPOSIUM ON HEMOTOLOGY

Joint Meeting with Section on Public Health

Moderator: Ernest H. Falconer, M.D., San Francisco

2:10—**The Rh Factors in Modern Medicine**—Paul G. Hattersley, M.D., Capt. (MC) U.S.A., Letterman General Hospital, by invitation.

A majority of Rh negative patients who are transfused with Rh positive blood become sensitized, and on repeated transfusion may have hemolytic reactions. Women who are sensitized may subsequently deliver infants with erythroblastosis fetalis. It is essential that Rh negative patients receive only Rh negative transfusions.

2:30—**Diagnosis and Treatment of Hemolytic Anemias**—Robert S. Evans, M.D., San Francisco.

The diagnosis of anemia due to abnormal hemolysis depends on demonstration of increased blood formation and

increased bile pigment excretion. Jaundice is not a constant sign. Congenital or familial hemolytic anemia can be sharply differentiated from acquired hemolytic anemia. The treatment for both groups is transfusion and if necessary splenectomy.

2:50—Splenomegaly and Its Relation to the Liver in Hematopoietic Disorders—S. P. Lucia, M.D., San Francisco.

The spleen usually participates in disorders of the hematopoietic system in a passive manner, excepting in certain syndromes characterized by hemolysis or extra-medullary erythropoiesis. The removal of the spleen is beneficial only in the following conditions: (1) Diseases having their origin in the spleen; (2) Aberrant physiological alterations due solely to splenic dysfunction; and, (3) Diseases in which the presence of an enlarged spleen places a heavy physiological burden on the liver.

3:10—Newer Methods in the Treatment of Leukemias and Lymphomas—Howard R. Bierman, M.D., San Francisco.

An evaluation of the new chemotherapeutic methods: The rationals, aims and present status of the amine mustards, polyglutamic acid derivatives, urethane, thiouracil, noncarbinols, and hydroxyacids (myelokentric and lymphokentric acids), and the diamidines as used in Hodgkin's disease, lymphosarcoma, mycosis fungoides, myelomata, myelogenous, lymphogenous and monocytic leukemias. Also, a description of the complications, the supportive therapy required, and course of patients treated with these agents.

3:30—Intermission.

3:40—Treatment of Hypochromic Anemia and Certain Macrocytic Anemias—Ernest H. Falconer, M.D., San Francisco.

(1) Hypochromic anemia: Causes: (a) blood loss; (b) failure of iron absorption; and (c) infection—interference with utilization of systemic iron. (2) Macrocytic anemia, Addisonian pernicious anemia, sprue and dietary deficiency. Cause and treatment.

4:00—Organizational Problems of Blood Banks—Donald C. Harrington, M.D., Stockton.

This paper discusses the problems encountered by a relatively small county medical society in its efforts to organize a blood bank to serve a community of about 200,000 people. The steps taken in the organization of the bank and the final pattern will be presented.

4:20—Questions in writing to the Speakers.

5:00—Recess: Annual Meeting of California Society of Internal Medicine.

SECTION ON GENERAL SURGERY

Clarence J. Berne, M.D., Los Angeles, *Chairman*
A. Morse Bowles, M.D., Santa Rosa, *Secretary*
Conrad J. Baumgartner, M.D., Beverly Hills, *Assistant Secretary*

CLARENCE J. BERNE
Chairman, General Surgery

A. MORSE BOWLES
Secretary, General Surgery

Sunday, April 11, 2:00 P.M., Curran Theater

Joint Meeting with Sections on General Medicine, Obstetrics and Gynecology, General Practice and Public Health

For Program, see Section on General Medicine

Monday, April 12, 9:00 A.M., Curran Theatre

Joint Meeting with Sections on General Medicine, Radiology, Pathology and Bacteriology

For Program, see Section on General Medicine

Tuesday, April 13, 2:00 P.M., Curran Theater

Joint Meeting with Sections on Industrial Medicine and Surgery, General Practice, and Neuropsychiatry

2:00—Chairman's Address: Management of Acute Peritonitis—Clarence J. Berne, M.D., Los Angeles

A review of the pathology and present status of the management of acute peritonitis, particularly that of appendiceal origin. The relative value of sulfonamides, penicillin and streptomycin will be stressed.

2:20—Surgical Significance of Acute Abdominal Pain—J. William Hinton, M.D., New York, N. Y.

A discussion of organic diseases, physiological conditions, and psychogenic factors producing acute abdominal pain with the indications and contra-indications for surgical intervention.

3:00—Business Meeting and Election of Officers.

TRAUMATO-THERAPY SYMPOSIUM

Chairman of Panel: George Sanderson, M.D., Stockton

3:10—The Immediate Care of the Severely Injured Patient—John J. Loutzenheiser, M.D., San Francisco.

Discussion of phases of surgical management of severely injured persons. (1) Medical aid organization needs; (2) Initial surgery—its how, when and wheres; (3) Reparative surgery—general principles; (4) Reconstructive surgery—relation to previous phases; and (5) Rehabilitative measures—early recognition of eventual needs of physically handicapped.

3:30—Decline in the Use of Plasma—Arthur C. Pattison, M.D., Pasadena.

A discussion of the trend away from plasma and toward the more liberal use of whole blood in replacement therapy. Predicated on: (1) The reactions to and deficiencies of pooled plasma; (2) the demonstration of the masked anemia attending "chronic shock of nutritional deficiencies"; and (3) the reduced red cell volume consequent to traumatic injuries.

3:50—The Nervous Woman in Industry—Kenneth Drake Gardner, M.D., San Francisco.

The nervous woman in industry is a disability problem. Maladjustments and the excessive use of stimulants are etiological factors. Organic disease usually is not demonstrated except for menopausal instabilities and psychosomatic manifestations. Treatment is symptomatic and an attempt to readjust to life, work and home.

4:10—Causalgia in Peripheral Nerve Lesions—Edward W. Davis, M.D., San Francisco, and Eugene McDaniel Webb, M.D., San Francisco, by invitation.

Consideration will be given to the incidence, characteristics and therapy for causalgia of post-traumatic origin in lesions of the peripheral nerves.

Discussion by Howard C. Naffziger, M.D., San Francisco.

4:40—Question Period.

SECTION ON GENERAL PRACTICE

Stanley R. Truman, M.D., Oakland, *Chairman*
Karl L. Dieterle, M.D., Los Angeles, *Secretary*

STANLEY R. TRUMAN
Chairman, General Practice

KARL L. DIETERLE
Secretary, General Practice

Sunday, April 11, 2:00 P.M., Curran Theater

Joint Meeting with Sections on General Medicine, General Surgery, Obstetrics and Gynecology, and Public Health

For Program, see Section on General Medicine

Monday, April 12, 9:00 A.M., Empire Room, Sir Francis Drake

9:00—Postoperative Genital Urinary Complications—Elmer Belt, M.D., Los Angeles.

The most frequent postoperative urinary problem after general surgery is urinary retention. Retention may be due to previously unrecognized dynamic obstruction, but is more often psychogenic or due to a sympathetic nervous system disturbance. Catheterization must not be feared. The mistake of permitting over-distention must not be permitted. Irritative postoperative lesions are usually due to trigonitis, cystitis, or pyelitis. Anuria may be due to shock, chemical renal injury, or block due to crystals, detritus, or edema. Operative injuries to the urinary tract are more frequent than ordinary statistics reveal, because of failure in reporting.

9:25—Discussion.

9:35—Common Pediatric Problems in General Practice—Sam J. McClendon, M.D., San Diego.

There are 335 pediatricians in California to serve some 10,000,000 persons. The problems relative to public health and the control of diseases rests primarily with the general practitioner. One of the major problems is that of rheumatic fever, in California just as serious as any other area in the U.S.A. The general practitioner is also concerned with all phases of preventive pediatrics. Recent advances in many fields are helping us to have a healthier citizenry. California is beset by many legislative panaceas; we must familiarize with these trends to preserve the best that private practice offers.

10:00—Discussion.

10:10—Problems of General Practice in Rural California—Hollis L. Carey, M.D., Gridley.

A brief discussion is presented of the more important conditions related to rural medical practice in this State. Provisions for training nursing and technical personnel for this type of smaller rural hospital are needed. Since the major burden of the care of his patients rests on the physician in rural and general practice, it is reasonable for him to assume a large share of the responsibility of directing and guiding the developments of this branch of medical practice.

10:35—Discussion, by J. Frank Doughty, M.D., Tracy.

10:45—Recent Advances in the Treatment of Syphilis—Thomas H. Sternberg, M.D., Los Angeles.

A review of the use of penicillin preparations, alone or combined with bismuth, mapharsen or fever, in the treatment of early, latent and late syphilis. Current research data of the Syphilis Study Section of the National Institute of Health are analyzed. Ambulatory and hospital treatment schedules are recommended.

11:10—Discussion.

11:20—Chairman's Address: Opportunities and Responsibilities of the General Practitioner—Stanley R. Truman, M.D., Oakland.

11:40—Business Meeting and Election of Officers.

Monday, April 12, 2:00 P.M., Curran Theater
Joint Meeting with Sections on General Medicine, Urology, and Pediatrics
For Program, see Section on General Medicine

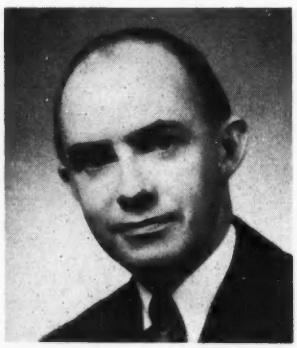
Tuesday, April 13, 9:00 A.M., Rooms 214-217 St. Francis Hotel
Joint Meeting with Section on Public Health
For Program, see Section on Public Health

Tuesday, April 13, 2:00 P.M., Curran Theater
Joint Meeting with Sections on General Surgery, Industrial Medicine and Surgery, and Neuropsychiatry
For Program, see Section on General Surgery

SECTION ON ANESTHESIOLOGY

Ida Hessig, M.D., Altadena, *Chairman*
William B. Neff, M.D., San Francisco, *Secretary*

IDA HEISSIG
Chairman, Anesthesiology



WILLIAM B. NEFF
Secretary, Anesthesiology

Sunday, April 11, 1:30 P.M., Room 220, St. Francis Hotel

1:30—Recent Advantages in Pediatric Anesthesia—Digby Leigh, M.D., Vancouver, B.C.

2:10—Discussion by Harry Lapp, M.D., San Francisco.

2:20—Problems in Departmental Organization—Francis J. Murphy, M.D., San Francisco.

2:40—Discussion by John Dillon, M.D., Los Angeles.

2:50—Anesthetic Morbidity—Ernest H. Warnock, M.D., Los Angeles.

Patient morbidity from anesthetic agents is serious. Improvement in methods and a better understanding of the physiology of anesthesia has decreased morbidity perceptibly. Further decrease may be brought about by pre- and postoperative care by the anesthesiologist.

3:10—Discussion by Malcolm Hawk, M.D., Palo Alto.

3:20—White Water and Black Magic—Mr. Richard C. Gill, Palo Alto, by invitation.

Jungle aspects of the Terminal Expedition resulting in the evolution of the modern clinically adequate curare. Motion picture of the jungle side of the 1938-39 Gill Merrill Expedition into northeastern Amazonia. The expedition had as its objective the substantiation of the ethnobotany of several types of curare and—most importantly—the quantitative and qualitative evolution of a specific variant of the crude drug to fulfill certain predetermined clinical requisites.

Monday, April 12, 2:00 P.M., Room 210, St. Francis Hotel

2:00—Business Meeting.

2:30—A Comparison of Demerol and Methadon as Analgesics—Maurice L. Tainter, M.D., Rensselaer, New York.

Demerol and Methadon have advantages over morphine. Demerol requires a higher dosage than Methadon, but produces less respiratory depression. Therefore, it can be used

more freely in cases where respiratory depression is contraindicated. Demerol does not depress the cough reflex, and Methadon is preferred for this purpose. Both drugs have a sufficient tendency to produce addiction that the usual narcotic restrictions should be observed.

3:00—**Experimental and Clinical Investigation of Several New Analgesics During Nitrous Oxide Anesthesia—Preliminary Report**—Richard Thompson, M.D., San Francisco, by invitation.

Nitrous oxide anesthesia with moderate premedication can be made sufficiently flexible to meet most surgical demands only when supplemented by additional injections of analgesica and/or relaxants. Accordingly, the properties of two new analgesic agents were investigated and their effects were compared with those of demerol and morphine when used to obtund the reflexes during nitrous oxide-oxygen anesthesia.

3:20—**Discussion** by Bruce Anderson, M.D., Oakland.

3:30—**Problems Confronting the Anesthesiologist When Excessive Fluids Are Required During Operation**—Fenimore Davis, M.D., Oakland.

In a series of three cases requiring large amounts of blood during surgery the end results were not good. Obtaining blood of the correct type has not been easy in an emergency, and there has been worked out no satisfactory way of quickly estimating loss so that replacement may be adequate. It is as dangerous to give too much fluid to these patients as too little. Recent information on the use of blood plasma will be discussed.

3:50—**Discussion** by Grace Binger, M.D., San Jose.

Tuesday, April 13, 11:00 A.M., Room 210, St. Francis Hotel

NOTE: 9:30 a.m., Curran Theater. Wesley Bourne, M.D., Professor of Anesthesia, McGill University, Montreal, Canada, will address the Second General Meeting. Subject: At the Head of the Table.

11:00—**Spinal Anesthesia with Preoperative and Postoperative Factors Integrated**—Seth W. Sensiba, M.D., Santa Monica.

Valuable information concerning drugs and their application is progressively available to facilitate safer and more effective spinal nerve block. Brief consideration of subarachnoid spinal anesthesia with special reference to pre- and postoperative sedation and analgesia. Physiological functions, both cellular and general, are of primary importance.

11:25—**Discussion** by Charles Wycoff, M.D., San Francisco.

11:35—**Relation of Neurological Complications of Subarachnoid Block to Some Unseen Dangers of New Techniques**—Marshall L. Skaggs, M.D., San Francisco.

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Maximilian E. Obermayer, M.D., Los Angeles, *Chairman*
Robert A. Stewart, M.D., Berkeley, *Vice-Chairman*
W. W. Duemling, M.D., San Diego, *Secretary*
Ervin H. Epstein, M.D., Oakland, *Assistant Secretary*

MAXIMILIAN E. OBERMAYER
Chairman
Dermatology and Syphilology

W. W. DUEMLING
Secretary
Dermatology and Syphilology

Monday, April 12, 2:00 P.M., Letterman Hospital

2:00—**Seminar on Histopathology**—(Note: Meeting confined to Registrants of Seminar.)

Tuesday, April 13, 9:30 A.M., Borgia Room, St. Francis Hotel

9:30—**Present Status of our Knowledge of Lupus Erythematosus**—Henry E. Michelson, M.D., Minneapolis, Minnesota.

10:00—**Round Table Discussion on Therapy.**
Moderator: Henry E. Michelson, M.D., Minneapolis, Minnesota

Tuesday, April 13, 2:00 P.M., Borgia Room, St. Francis Hotel

Joint Meeting with Section on Eye, Ear, Nose and Throat

2:00—**Aphthous Oral and Genital Ulcers with Conjunctivitis. (Behcet's Type Symptom Complex**—Lawrence M. Nelson, M.D., Santa Barbara.

Case of a seventeen year old white male with painful, eroding apththous ulcers of the mouth and genitalia and recurrent mild conjunctivitis. No cause for the condition has been found and no treatment has resulted in any permanent improvement.

2:25—Discussion by Otto P. Diederich, M.D., Fresno.

2:35—Treatment Problems of Marginal Blepharitis—Norman M. O'Farrell, M.D., San Diego.

Marginal blepharitis is usually a local manifestation of seborrheic dermatitis. As such, treatment must be directed not alone to the lids but to the scalp, and to such general factors as obesity, vitamin intake, and fatty control of the diet.

3:00—Discussion.

3:10—Visible Oral Lesions—Francis A. Sooy, M.D., San Francisco.

A kodachrome slide demonstration of the gross and microscopic appearance of a variety of oral diseases. The photographic technique used is demonstrated.

3:30—Discussion.

3:40—External Otitis—Charles W. Rees, M.D., San Diego.

Otitis externa is one of the most common diseases seen by the otologist. The pathologic changes which may occur in the external ear are classified. The etiological agents of inflammation of the external ear structures are discussed minimizing the importance of fungi as primary invaders. Therapy for symptomatic relief is outlined and the specific action of therapeutic agents is reviewed.

4:00—Discussion.

4:10—Evaluation of Therapy in Ocular Syphilis—David O. Harrington, M.D., San Francisco, and Randall Henry, M.D., San Francisco, by invitation.

(1) Acute ocular syphilis. (a) Interstitial Keratitis—evaluation of fever therapy and iontophoresis with penicillin; (b) syphilitic iritis—treatment with penicillin and fever therapy; and (c) syphilitic choroiditis—similar treatment. (2) Chronic ocular syphilis. (a) Tabo-paresis with ocular involvement—penicillin and fever therapy; and (b) syphilitic optico-arachnoiditis—surgical treatment. (3) Remarks on Tryparsamide. (4) Pitfalls of penicillin treatment.

4:30—Discussion.

Wednesday, April 14, 9:00 A.M., Borgia Room, St. Francis Hotel

9:00—Chairman's Address—Maximilian E. Obermayer, M.D., Los Angeles.

9:30—Acanthosis Negricans with Unusual Cutaneous and Clinical Features—William H. Goeckerman, M.D., Los Angeles, and Louis Wilhelm, M.D., Los Angeles.

A case of rapid dissemination of discrete verrucous papules over the entire body before any involvement of the classical areas with the usual acanthosis and pigmentation. No physical complaint prior to the eruption, yet on necropsy shortly after eruption, generalized metatasis was observed.

9:55—Discussion by Ernest K. Stratton, M.D., San Francisco.

10:05—Time-Temperature Relationships in Thermal Blister Formation—Craig Williamson, M.D., Los Angeles, by invitation, and Julius R. Scholtz, M.D., Los Angeles.

Preliminary statement on studies of blister thresholds with reference to the number of degree-minutes necessary to produce bullae in the skin of the normal adult forearm. Time and stages of development and the sequelae of the blisters.

10:30—Discussion by Maximilian Obermayer, M.D., Los Angeles.

10:40—Superficial Basal Cell Epithelioma of the Covered Parts of the Body—William F. B. Harding, M.D., San Francisco, by invitation.

Review of the clinical aspects and histopathology of intraepidermal epitheliomas of the basal cell type. Selection of the proper method of treatment will be emphasized. Report on incidence of lesions in the Visible Tumor Clinic of the U. C. Hospital.

11:00—Discussion by Louis H. Winer, M.D., Los Angeles, and Stuart C. Way, M.D., San Francisco.

11:10—Myelitis in Early Lues—Ernest K. Stratton, M.D., San Francisco.

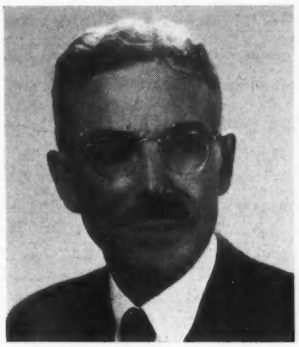
A generalized dermatitis with exfoliation in a patient with secondary lues after eight injections of neoarsphenamine. Neurological symptoms developed in a few weeks and led to a fatal issue. Question: Arsenical intoxication or infection (luetic) was the basic factor?

11:30—Discussion by Helen L. Starbuck, M.D., San Francisco.

11:45—Business Meeting and Election of Officers.

SECTION ON EYE, EAR, NOSE AND THROAT

Dohrmann K. Pischel, M.D., San Francisco, *Chairman*
Russell Fletcher, M.D., Berkeley, *Vice-Chairman*
George L. Kilgore, M.D., San Diego, *Secretary*



DOHRMANN K. PISCHEL
Chairman
Eye, Ear, Nose and Throat

GEORGE L. KILGORE
Secretary
Eye, Ear, Nose and Throat

Monday, April 12, 2:00 P.M., Green Room, St. Francis Hotel

2:00—Some Principles of Plastic Surgery of the Eyelids—Crowell Beard, M.D., San Jose.

In the light of the recent advances and the older accepted principles, the management of some of the commoner eyelid defects will be discussed . . . not those of military origin. The relationship between the plastic surgeon and the ophthalmologist in caring for these conditions will be considered.

2:20—Discussion.

2:30—Encephalitis from the Standpoint of the Ophthalmologist—Dwight Trowbridge, M.D., Fresno.

The presenting complaints of 165 cases treated in the Fresno General Hospital in the past five years will be reviewed. Emphasis will be on ocular symptoms and signs. Correlation of the presence or absence of certain ocular signs and symptoms with the serological diagnosis of western equine or St. Louis type encephalitis will be attempted.

2:50—Discussion.

3:00—Operation for Congenital Cataract—Otto Barkan, M.D., San Francisco.

The subject of congenital cataract is given little space in textbooks of today. In the present article the disadvantages of the traditional treatment by needling are noted. A technique of "linear extraction" with recent modifications designed to permit safe removal of congenital cataracts in early infancy as well as later is given.

3:20—Discussion.

3:30—Treatment of Retinoblastoma—Jerome Bettman, M.D., San Francisco.

The methods of treating retinoblastoma are presented, together with consideration of clinical judgment involved in which treatment to use. A review of interesting cases of retinoblastoma treated at Stanford Hospital is presented.

3:50—Discussion.

4:00—A New Concept of the Anatomy of the Perilenticular Spaces—Henry Minsky, M.D., New York, by invitation.

A color motion picture showing the result of anatomical researches in the spaces around the lens and its suspensory ligament, and their relations to the anterior and posterior chamber.

Tuesday, April 13, 9.00 A.M., Green Room, St. Francis Hotel

9:00—A Technique for Tonsillectomy under General Anesthesia—Lewis F. Morrison, M.D., San Francisco.

A kodachrome picture showing the technique employed at the University of California Hospital for the removal of tonsils and adenoid tissue. The position of the patient, surgical set-up, instruments, and the advantage of added exposure when the operator stands at the head of the table. Advantage of a dry field and the method employed to obtain and maintain hemostasis.

9:20—Discussion.

9:30—Observations on Blast Damaged Ear Drums—Arthur H. Rice, M.D., Berkeley.

Eighty-seven uncontaminated blast perforations of the tympanum were observed. A system of classification as to severity is offered as a means of evaluating treatment in future reports. Most of the perforations were treated by application of a patch. Observations on healing and results.

9:50—Discussion.

10:00—Factors Influencing the Choice of Hearing Aids—William T. Duggan, M.D., San Francisco.

A resume of the work now being done in various hearing research centers in this county; the importance of an acoustic laboratory; the types of aids now commonly used; who should wear hearing aids; some of the reasons why so few wearers obtain satisfactory results.

10:20—Discussion.

10:30—The Treatment of Sinusitis in Children—Victor Goodhill, M.D., Los Angeles.

No single panacea is offered for this problem. The therapeutic approach is based upon an understanding of the embryology, anatomy and physiology of the nose and paranasal sinuses in the growing child. The judicious employment of allergic principles and conservative surgical techniques, will do much to solve it.

10:50—Discussion.

11:00—Practical Points in the Management of the Allergic Child—William C. Deamer, M.D., San Francisco.

Asthma often accompanies allergic rhinitis which has been thought to be infectious "colds." The etiology of both the nasal and pulmonary allergy is usually identical and is more often inhalant than food. The commonest inhalant factor is house dust and its components, the elimination of which is probably more important than desensitization.

11:20—Discussion.

11:30—Business Meeting.

Tuesday, April 13, 2:00 P.M., Borgia Room, St. Francis Hotel

Joint Meeting with Dermatology and Syphilology

For Program, see Section on Dermatology and Syphilology

SECTION ON INDUSTRIAL MEDICINE AND SURGERY

Keene O. Haldeman, M.D., San Francisco, *Chairman*
Joseph D. Peluso, M.D., Los Angeles, *Vice-Chairman*
Nelson J. Howard, M.D., San Francisco, *Secretary*

KEENE O. HALDEMAN
Chairman
Industrial Medicine and Surgery

NELSON J. HOWARD
Secretary
Industrial Medicine and Surgery

Sunday, April 11, 2:00 P.M., Green Room St. Francis Hotel

2:00—The Rx for Light Work and the Obstacles It May Encounter—Christopher Leggo, M.D., Crockett.

The problems encountered in "easy work" requests for the partially disabled employee, the difference between the temporary and the permanent partial, when "easy work" is actually a rehabilitation procedure, and when an incentive for delayed recovery. Some cases when "easy work" is of advantage and when it is a false economy and harmful to all concerned.

2:20—Discussion by Rees B. Rees, M.D., San Francisco.

2:30—Traumatic Injuries to the Abdomen and Its Contents—Donald C. Collins, M.D., Los Angeles.

Severe traumatic injuries to the abdomen and its contents are steadily increasing due to speeding up of all types of transportation. Rapid and correct diagnoses are essential to save lives; particularly, the recognition of injuries to abdominal viscera or their blood supply. This is the Industrial Surgeon's responsibility.

2:50—Discussion by Edmund Butler, M.D., San Francisco, and E. Eric Larson, M.D., Los Angeles.

3:00—Tumors and Trauma and Industrial Liability—Jesse L. Carr, M.D., San Francisco.

While still regarded in many centers as an improbability, malignancies in the human body subsequent to single or multiple traumata are becoming regarded, not only by Industrial Accident referees, but also by some physicians, as occurring with an apparent direct relationship to the trauma. It is the purpose of this paper to review the essential medical facts, the recent literature, and the latest medical testimony with court and Accident Commission decisions relative to this alleged relationship, with special emphasis on the medical testimony which has led to the granting of industrial awards.

3:20—Discussion by A. M. Moody, M.D., San Francisco and David A. Wood, M.D., San Francisco.

3:30—Arthrotomy of the Knee, with Removal of the Semilunar Cartilage—F. Harold Downing, M.D., Fresno.

Color film showing anatomical demonstration of the knee. Surgical technique of excision of the medial semilunar cartilage. Preoperative examination and postoperative results. Introductory remarks will emphasize the need for careful total excision of the semilunar cartilage when indicated.

3:50—**Discussion** by Merrill C. Mensor, M.D., San Francisco, and Ralph Soto-Hall, M.D., San Francisco.

4:00—**Swine Erysipeloid**—Martin W. Debenham, M.D., San Francisco.

"Swine Erysipeloid" is the name given to a type of cellulitis peculiar to meat and fish handlers. It is rare in any other class of patients, but when encountered presents definite problems both as to diagnosis and treatment. The findings of a series of cases treated over a 10-year period are presented and discussed.

4:20—**Discussion** by Joseph H. Boyes, M.D., Los Angeles, and J. Minton Meherin, M.D., San Francisco.

4:30—**Differential Diagnoses and Treatment of the Infectious Arthritities**—Leon O. Parker, M.D., San Francisco.

The differential diagnosis of the various infectious joint diseases, as well as those that simulate infection but do not prove to be so, will be presented. The diagnostic findings, history, physical examination, x-ray, joint puncture, and joint biopsy will be evaluated. Treatment will be approached from the problem as to when to immobilize and when to force restoration of function, as well as the use of chemotherapy.

4:50—**Discussion** by Robert K. Gustafson, M.D., Pasadena, and Arthur Haim, M.D., San Francisco.

Monday, April 12, 9:00 A.M., Green Room, St. Francis Hotel

9:00—**Pulmonary Affections of Occupational Origin**—Rutherford T. Johnstone, M.D., Los Angeles.

It is opportune that the attention of the general practitioner, radiologist, and "chest specialist" be called to the recently discovered, adverse reaction of the lungs to certain silicates and new chemicals utilized in industry. Radiography alone is not sufficient to make the diagnosis of these occupational pulmonary affections. (Lantern Slides.)

9:20—**Discussion** by Sidney Shipman, M.D., San Francisco.

9:30—**Median Nerve Injuries in Fractures of the Wrist**—N. Meadoff, M.D., Bakersfield.

Three cases. (1) Surgical exploration of the median nerve at the wrist with primary sensory and sympathetic nerve paralysis with normal motor function following a transcarpal dislocation of the wrist. (2) Two cases of sensory median nerve impairment after the fractures of the wrist were placed in casts. The pertinent anatomical factors and the literature are reviewed.

9:50—**Discussion** by John B. DeC.M. Saunders, M.D., San Francisco, and John D. Gillis, M.D., Los Angeles.

10:00—**Ambulatory Traction Splint in Fractures of Upper End of Humerus**—Donald McNeil, M.D., Sacramento.

Our experience in treating these fractures with the usual type of abduction traction splints, has not been satisfactory. Treatment by traction in recumbency has obvious disadvantages economically. A simple ambulatory traction splint is described which allows alignment of the lower fragment with the abducted and anteriorly angulated upper fragment.

10:20—**Discussion** by Thomas R. Haig, M.D., Sacramento, and Ralph Soto-Hall, M.D., San Francisco.

10:30—**Reconstruction of the Ankle**—Orris R. Myers, M.D., Eureka.

This paper is based upon an experience of attempting to reconstruct the external malleolus and distal portion of the fibula. There was a marked varus deformity and pain, weakness of the ankle joint. Osteogenous bone graft was used to replace the lateral malleolus; 11-year follow-up. A brief resume will be included in the paper on reconstruction work of the ankle joint.

10:50—**Discussion** by Donald R. King, M.D., San Francisco.

11:00—**Costly Mistakes Made in the Treatment of Complicated Fractures**—Douglas D. Toffelmier, M.D., Oakland.

It has been observed that complicated fractures treated by external pin fixation, or internal screws and plates, frequently come to non-union and need reoperation. The presence of infected pin holes causes disastrous results in subsequent bone graft procedures. An idea or two on how to avoid disaster in these cases.

11:20—**Discussion** by Frederick C. Bost, M.D., San Francisco.

11:30—**Business Meeting and Election of Officers.**

Tuesday, April 13, 2:00 P.M., Curran Theater

Joint Meeting with General Surgery, Neuropsychiatry, and General Practice

For Program, see Section on General Surgery

SECTION ON NEUROPSYCHIATRY

Robert B. Aird, M.D., San Francisco, *Chairman*
Cullen W. Irish, M.D., Los Angeles, *Secretary*

ROBERT B. AIRD
Chairman, Neuropsychiatry

CULLEN W. IRISH
Secretary, Neuropsychiatry

Sunday, April 11, 2:00 P.M., Rooms 214-217, St. Francis Hotel

PSYCHIATRIC SECTION

2:00—Anxiety Reactions to Military Trans-Himalayan Plane Flights During World War II—Henry J. Wegrocki, M.D., Los Angeles.

The A.T.C. trans-Himalayan flights, although non-combat in nature, were, nevertheless, provocative of many profound and crippling anxiety reactions among flying personnel. The multiple factors entering into and modifying these reactions are considered by comparing two groups, 55 defaulting and 45 nondefaulting flyers, with reference to personality vulnerability, motivation and degree of aerial trauma experienced.

2:20—Discussion by Cullen Ward Irish, M.D., Los Angeles, and Norman A. Levy, M.D., Beverly Hills.

2:30—Energy Dynamics in Psychotherapy—Herbert A. Duncan, M.D., Pasadena.

The mobilization, channeling and utilization of emotional tension is implied in human activity. A non-technical interpretive schema of its operation initiates insight, supports the patient, satisfies his urge to have something done, and lays the basis for more penetrating, individualized interpretations. Applicable to group and individual psychotherapy.

2:50—Discussion by H. Douglas Eaton, M.D., Los Angeles, and John F. Card, M.D., San Francisco.

3:00—The Significance of Some Mental Symptoms During Convalescence from Surgical Operations—Joseph G. Rushton, M.D., Los Angeles.

Surgery may be considered a type of trauma. The mental reaction of such trauma may be predominantly organic or functional. The organic reactions appear as deliria. Importance of early recognition and prompt treatment stressed. Surgery may exaggerate or reveal defects of personality previously compensated for.

3:20—Discussion by Walter F. Schaller, M.D., San Francisco, and Alvin V. Gerty, M.D., Pasadena.

3:30—Persistent Self-Mutilation Following Surgical Procedures—Paul A. Gliebe, M.D., San Francisco, and Leon Goldman, M.D., San Francisco.

Conscious and unconscious needs for continued punishment may complicate the postoperative course of surgical procedures. Recognition of the underlying emotional factors is difficult, and often delay leads to chronic states of invalidism with its attendant social and economic loss.

3:50—Discussion.

4:00—Psychiatric Preceptee Training for General Medical Practitioners—Eugene Ziskind, M.D., Los Angeles.

A report on a project under which medical practitioners are assigned appointments under the direction of psychiatrists. Emphasis is placed on practical experience in the management of psychologically conditioned somatic complaints encountered in general practice.

4:20—Discussion by J. Peter Frostig, M.D., Los Angeles, and Philip Solomon, M.D., Beverly Hills.

Monday, April 12, 2:00 P.M., Rooms 214-217, St. Francis Hotel

NEUROLOGY SECTION

2:00—Election of Officers and Business Meeting.

2:10—Chairman's Address: Role of Tissue Permeability with Particular Reference to the Blood-Brain Barrier in Diseases of the Central Nervous System—Robert B. Aird, M.D., San Francisco.

Alterations of permeability of the vascular tree supplying the C.N.S. are presumably of fundamental importance in the metabolism thereof. Pathological conditions of the system are known to modify this basic mechanism. Various studies on this problem will be reviewed and a brief report made on new approaches which are being tried, that give promise of modifying this mechanism and affording a basis for therapy in certain neurological conditions.

2:30—Electromyographic Diagnosis of Lower Motor Neuron Disease—James G. Golseth, M.D., Los Angeles, and O. Leonard Huddleston, M.D., Los Angeles.

Skeletal muscle deprived of its nerve supply begins to fibrillate spontaneously. As a result of denervation fibrillation, characteristic voltages are generated which can be recorded with the electromyograph. Such electromyograms afford positive evidence of lower motor neuron disease.

2:50—Discussion by Nicholas A. Bercel, M.D., Los Angeles, and B. Feinstein, M.D., San Francisco.

3:00—Extradural Cerebellar Hemorrhage, Report of Case and Review of the Literature—Frank M. Anderson, M.D., Los Angeles.

Extradural hemorrhage limited to the posterior fossa has been recorded by only four writers, with a total of five cases. Three of these were operated upon and recovered. The present case had a two-week history and presented papilledema, bilateral adducens palsy, ataxia, unsteady gait and diminished tendon reflexes. Ventriculogram, followed by suboccipital craniotomy. Removal of extradural clot. Recovery.

3:20—Discussion by H. M. Cuneo, M.D., Los Angeles, and Edmund J. Morrissey, M.D., San Francisco.

3:30—Observations on the Use of Tantalum in Cranioplasty—Nathan C. Norcross, M.D., Oakland.

Tantalum plate has enjoyed a considerable vogue of late. We can delimit its value and bring out certain features concerning its use when it is considered as a material for cranioplasties. In the late follow-up of such, the technique of implanting as well as its use in potentially infected areas is important. If certain features of its use are disregarded, failures are bound to occur.

3:50—Discussion by Edward W. Davis, M.D., San Francisco.

4:00—Use of Testosterone Propionate in Pituitary Tumor Case (Seven Years Observation)—Charles Posner, M.D., Pasadena.

Effects of testosterone propionate on personality, epiphyseal closure, sexual development of 24-year-old eunuchoid male patient with intrasellar tumor, clinically chromophobe. X-ray therapy. Patient now in good health.

4:20—Discussion by C. Hunter Shelden, M.D., Los Angeles, and Cyril B. Courville, M.D., Los Angeles.

4:30—Head Retraction Reflex—Robert Wartenberg, M.D., San Francisco.

Demonstration of a film on the Head Retraction Reflex. This reflex, when positive, indicates a bilateral lesion of supracervical pyramidal tracts, and has proven to be of practical importance.

4:50—Discussion.

Tuesday, April 13, 2:00 P.M., Curran Theatre

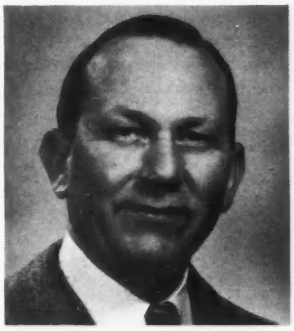
Joint Meeting with Sections on General Surgery, Industrial Medicine and Surgery, and General Practice

For Program, see Section on General Surgery

SECTION ON OBSTETRICS AND GYNECOLOGY

T. Floyd Bell, M.D., Oakland, *Chairman*
A. M. McCausland, M.D., Los Angeles, *Vice-Chairman*
D. A. Dallas, M.D., San Francisco, *Secretary*

T. FLOYD BELL
Chairman
Obstetrics and Gynecology



D. A. DALLAS
Secretary
Obstetrics and Gynecology

Sunday, April 11, 2:00 P.M., Curran Theater

Joint Meeting with Sections on General Medicine, General Surgery, General Practice and Public Health

For Program, see Section on General Medicine

Monday, April 12, 9:00 A.M., Room 261, St. Francis Hotel

9:00—Infant Resuscitation—Harold M. Lyons, M.D., San Francisco.

This paper, with no claim at originality, touches on the physiological processes active in a newborn, after birth, and offers a review of the effective methods of resuscitation as opposed to time-honored but inefficient ones. Gratifying reduction in neonatal mortality is the result of a minimum of time expended.

9:30—Discussion by Harold Faber, M.D., San Francisco.

9:40—Poliomyelitis in Pregnancy—Jane Schaefer, M.D., San Francisco, and Edward B. Shaw, M.D., San Francisco.

The various types of acute anterior poliomyelitis complicating pregnancy in all trimesters have been treated in the Communicable Disease Department of Children's Hospital. The case histories are summarized and the progress of the disease as a whole surveyed with special reference to the obstetrical outcome. The high percentage of abortion in patients with acute poliomyelitis is noted and the therapeutic measures for patients in whom the disease occurs late in pregnancy are considered.

10:00—Discussion by Edward B. Shaw, M.D., San Francisco.

10:10—Early Ambulation in Obstetrics and Gynecology—Stirling G. Pillsbury, M.D., Long Beach.

(1) Early ambulation in obstetrics. (a) History; (b) what is early ambulation; (c) data, and (d) advantages. (2) Early ambulation in gynecology. (3) Contraindications. (4) Legal aspects.

10:30—Discussion by Robert Dunn, M.D., Palo Alto.

10:40—Recess.

10:50—The Physiological Basis of Symptoms in Eclampsia—Ernest W. Page, M.D., Berkeley.

(1) The causes of the subjective symptoms in pre-eclampsia. (2) The nature of the proteinuria, and of hypertension. (3) The factors responsible for the edema. (4) The origin of the hepatic damage. (5) The predisposing causes of the convulsions. (6) The direction of therapeutic measures.

11:10—Discussion by Charles McLennan, M.D., San Francisco.

11:20—Business Meeting.

Tuesday, April 13, 2:00 P.M., Room 261, St. Francis Hotel

2:00—Chairman's Address—T. Floyd Bell, M.D., San Francisco.

2:30—Hormonal Therapy in Sterility, Habitual Abortion and Premature Labor—Raphael B. Durfee, M.D., San Francisco.

The clinical use of Chorionic Gonadotropic hormone in the treatment of Habitual Abortion and Endometrial Hyperplasia is discussed. Also the clinical use of Estrogenic hormone in those cases of sterility involving uterine hypoplasia and in the treatment and prevention of premature labor.

2:50—Discussion by C. Frederic Fluhmann, M.D., San Francisco.

3:00—Extra-peritoneal Caesarean Section—W. Dayton Clark, M.D., San Francisco.

Review of thirty cases with discussion of various types and indications therefore; and with special emphasis of anatomical relationships.

3:20—Discussion.

3:30—Chronic Cervicitis in General Practice—Carroll B. Andrews, M.D., Sonoma.

A clinical study of cervical pathosis and symptomatology in patients from adolescence to senescence as seen in a general practice. The relationship to focal infection, dysmenorrhea, menorrhagia, metrorrhagia, sterility and certain abnormalities of the puerperium as well as the effect on hormone balance are discussed. This preliminary paper is an effort to provoke more research in a rather neglected field.

3:50—Discussion by C. Frederic Fluhmann, M.D., San Francisco.

4:00—Gynecography—Moris Horwitz, M.D., and Sidney D. Mesirow, M.D., Beverly Hills.

The authors' method of roentgen diagnosis in gynecology. Indications and contraindications. Numerous roentgenograms of gynecologic pathology visualized by employment of the method will be shown.

4:20—Discussion.

SECTION ON PATHOLOGY AND BACTERIOLOGY

A. F. Brown, M.D., Glendale, *Chairman*
Gerson R. Biskind, M.D., San Francisco, *Secretary*
C. S. Small, M.D., Loma Linda, *Assistant Secretary*

ALBERT F. BROWN
Chairman
Pathology and Bacteriology

GERSON R. BISKIND
Secretary
Pathology and Bacteriology

Sunday, April 11, 2:00 P.M., Room 261, St. Francis Hotel

2:00—Organisms Isolated from Hairy Tongue—Gilbert D. Curtis, M.D., Glendale, and Thomas Laskaris, Ph.D., Glendale, by invitation.

A cultural study of the organisms associated with the clinical condition known as "Hairy Tongue" has been made. These have been compared with similar organisms isolated from the buccal cavity and from sputum. The relationship of Hairy Tongue to Trichomycosis Asillaris is considered.

2:15—Discussion.

2:25—Results with Cardiolipin Antigen in the Kline Test for Syphilis—Sidney J. Klein, Ph.D., Van Nuys, by invitation, and George M. Leiby, M.D., Van Nuys.

The use of Pangborn's highly purified cardiolipin-lecithin antigen in the slide test affords a simple, reliable test for syphilis. It showed higher sensitivity than the standard Kahn and Kolmer tests, and is recommended as a screen test. The degree of specificity obtained with cardiolipin antigen in tests on over 5,000 non-syphilitic sera approximated results obtained with the Kahn test. In 23 malaria cases the cardiolipin showed much greater specificity than

the Kahn. Tests with antigens containing varying cardiolipin; lecithin ratios showed optimal results with 1 part cardiolipin to 8 parts lecithin. Use of this ratio in testing on over 2,000 non-syphilitic sera gave results showing a specificity of 98.4 per cent and, in the case of Kolmer positive syphilitic sera a sensitivity of 99 per cent.

2:40—Discussion.

2:50—Laboratory Study of Carbohydrate Tolerance in Private Practice—H. R. Fisher, M.D., Los Angeles.

The value of carbohydrate tolerance studies in various diagnostic problems encountered in private practice is reviewed and illustrated. Patients exhibiting increased tolerance form an interesting group; the presentation will include the experience our group has had with this problem, and an outline of the testing methods used for its study.

3:05—The Effect of Intravenously Administered Glucose on the Blood Amylase Values—Reuben Straus, M.D., Beverly Hills.

This study reveals a depression of blood amylase values by intravenously injected glucose. This observation is of practical significance since it is sufficient to mask acute pancreatitis. The observation was made on several cases of acute pancreatitis. An experimental study in vitro and in vivo was also made.

3:20—Hepatic Clearance—A. E. Lewis, M.D., San Francisco.

Specific liver diseases produce specific patterns of dysfunction varying with the stage of the disease. These changes require quantitative evaluation. The following formula was derived for tests based on changes in concentration of intravenously injected substances:

Fraction of fluid vol. cleared = 2.3 (log initial conc.—log final conc.)/time.

3:45—Discussion of papers of Doctors Fisher, Straus, and Lewis by Marcus A. Krupp, M.D., San Francisco, and James Hopper, Jr., M.D., San Francisco.

4:05—Chairman's Address: Laboratory Arithmetic—A. F. Brown, M.D., Glendale.

Numbers may convey information, misinformation, or imagination. Practical aids are offered for reduction of mathematical fiction in laboratory reports.

Monday, April 12, 9:00 A.M., Curran Theater

Joint Meeting with General Medicine, General Surgery, and Radiology

For Program, see Section on General Medicine

Monday, April 12, 2:00 P.M., Room 261, St. Francis Hotel

2:00—The Pathogenesis of Toxoplasmosis—J. K. Frenkel, M.D., San Francisco.

Human cases of toxoplasmosis are being reported with increasing frequency. The causative organism is presumably a protozoan. It is lunate in shape, slightly smaller than a human red blood cell and is characterized by a wide host range. Cases in both humans and animals have been reported from all over the world. This extent of infection, types of infection, clinical signs and symptoms, the pathologic lesions and certain aspects of experimental infection will be discussed.

2:30—Pathological-Clinical Correlations of 150 Cases of Hodgkin's Disease—Warren L. Bostick, M.D., San Francisco.

The pathological material and clinical data from 150 cases of Hodgkin's Disease are reviewed. The diagnosis of, and the possible errors in the proper classification of, the paragranuloma, granuloma and sarcoma variant are discussed. Their clinical characteristics as noted in this series are analyzed. Original sites of onset of the tumors and their presenting signs and symptoms are listed, together with the correlations of ovarian activity and fever type to survival time.

3:00—Observations on 38 Cases of Acute Lymphatic Leukemia in Children—Paul Michael, M.D., Oakland.

A statistical study on thirty-eight case reports of acute lymphatic leukemia occurring in childhood with consideration of the blood picture, physical findings, onset, course and therapy, and postmortem reports on those on whom autopsies were performed.

3:30—Vaginal Smear Technique in the Diagnosis of Uterine Cancer—Virgil O. Parrett, M.D., Los Angeles.

This is a summary report on vaginal cytology as a screening method in the detection of cancer of the female genital organs. For one year routine smears were made on new admissions to the Gyn. Clinic. One thousand of these were surveyed by a repeat clinical examination, smear or biopsy. Cancers were detected by evidence found in smear and the patients referred for study and biopsy. These 1,000 cases were selected from a group of about 5,000 less well controlled. Conclusions: (1) Vaginal cytology methods constitute a good screening test; (2) Cytology studies are an accurate exclusion method in ruling out cancer of the genital organs; and (3) As a diagnostic procedure, the method is less accurate.

4:00—Business Meeting and Election of Officers.

SECTION ON PEDIATRICS

C. I. Mead, M.D., Bakersfield, *Chairman*
Alice Potter, M.D., San Francisco, *Secretary*
Carl A. Erickson, M.D., Pasadena, *Assistant Secretary*

C. I. MEAD
Chairman, Pediatrics

ALICE POTTER
Secretary, Pediatrics

Sunday, April 11, 2:00 P.M., Room 210, St. Francis Hotel

2:00—Congenital Atresia—J. Norton Nichols, M.D., Los Angeles.

A brief resume of the etiological and surgical history is followed by a discussion of the writer's results obtained in 30 operative cases. The opportunity for early diagnosis usually rests with the obstetrician or pediatrician. Pathology and surgical technique are illustrated by lantern slides.

2:15—Discussion.

2:30—Intestinal Obstruction in the Newborn—Albert G. Clark, M.D., San Francisco.

Discussion of diagnostic difficulties in intestinal obstruction of the newborn.

2:45—Discussion by John M. Moore, M.D., San Francisco.

3:00—Megacolon—Louise A. Yeazell, M.D., San Francisco.

Medical and surgical management of a group of children with congenital megacolon at U. C. Hospital.

3:20—Discussion.

3:30—Recess.

3:40—Physiology and Surgical Treatment of Patent Ductus Arteriosus—Emile F. Holman, M.D., San Francisco.

A review of the pathologic physiology of the patent ductus and of the indications and technique for its ligation with a presentation of representative cases.

4:00—Discussion by Ann P. Purdy, M.D., San Francisco.

4:10—Anesthesia in Children—Dorothy A. Wood, M.D., San Mateo.

A consideration of the management, medication and methods employed in the more or less "routine" surgical procedures such as tonsillectomy, herniaplasty and appendectomy. Use of nitrous oxide oxygen for dental extraction in children.

4:30—Discussion.

Monday, April 12, 9:00 A.M., Room 210, St. Francis Hotel

PANEL DISCUSSION ON "WHAT'S NEW IN PEDIATRICS"

Moderator: Paul Hamilton, M.D., San Marino

9:00—Allergy—William C. Deamer, M.D., San Francisco.

9:10—Infectious Diseases—Edward B. Shaw, M.D., San Francisco.

9:20—Pancreatic Disease—Gordon E. Gibbs, M.D., San Francisco, by invitation.

9:30—Care of Prematures—Jerome Mark, M.D., Los Angeles.

9:40—Treatment of Erythroblastosis—Herman Kirchdoerfer, M.D., Pasadena.

9:50—Nutritional Anemia—Paul Sturgeon, M.D., Los Angeles, by invitation.

10:00—Diagnosis of Anemias—Leon Oettinger, M.D., Los Angeles, by invitation.

10:10—Recess.

10:20—Immunization—John J. Miller, M.D., San Francisco.

10:30—Acute Infectious Lymphocytosis—Frank Plachte, M.D., Los Angeles, by invitation.

10:40—Diagnosis of Patent Ductus Arteriosus—Saul Robinson, M.D., San Francisco.

10:50—Treatment of Metatarsus Varus—Frances Baker, M.D., San Francisco.

11:00—Questions, in writing, to be passed to Moderator, who will distribute to members of the panel.

11:30—Business Meeting and Election of Officers.

Monday, April 12, 2:00 P.M.

Joint Meeting with Sections on General Medicine, General Practice, and Urology

SECTION ON PUBLIC HEALTH

Harold D. Chope, M.D., Stockton, *Chairman*
Malcolm H. Merrill, M.D., Berkeley, *Vice-Chairman*
Edward Lee Russell, M.D., Santa Ana, *Secretary*

HAROLD D. CHOPE
Chairman, Public Health

EDWARD LEE RUSSELL
Secretary, Public Health

Sunday, April 11, 2:00 P.M., Curran Theater

Joint Session with Sections on General Medicine, General Surgery, General Practice and Obstetrics and Gynecology

For Program, see Section on General Medicine

Monday, April 12, 9:00 A.M., Borgia Room, St. Francis Hotel

9:00—Chairman's Address: Where Were You in 1928?—Harold D. Chope, M.D., Stockton.

This paper compares the status of public health work in California in 1928 and 1948 and attempts to summarize the progress made in two decades. Possible fields of accomplishments for the future are outlined and the contribution of medicine and public health to the improvement of human welfare is discussed.

9:20—Report of an Outbreak of Ringworm of the Scalp Due to M. Audouini—Roy O. Gilbert, M.D., Los Angeles.

A description of our survey of a school population in which we suspected the presence of M. audouini infection, including the techniques employed in the survey, diagnostic and confirmatory procedures, and methods of control. Correlation of the fact-finding data of our work with that of other work in adjacent areas.

9:40—Educational Programs for Food Handlers and Their Relationship to the Control of Communicable Diseases—Carl J. Hawley, M.D., Los Angeles, and T. Ross Williams, B.S., Los Angeles, by invitation.

For five years the Los Angeles City Health Department has conducted educational programs for members of the food industry. Food handlers are taught the means by which food may become contaminated or infectious, and the necessity for appropriate ordinances and laws. Citations to the City Attorney for sanitary violations and the incidence of food poisoning has been reduced. No significant reduction in other enteric infections, the rickettsial or upper respiratory infections.

10:00—Business Recess. Election of Officers.

10:20—Problems in Radiological Interpretation and Their Implications in Mass X-Ray Survey—Jacob Yerushalmy, Ph.D., Berkeley, by invitation.

Recent comparative x-ray studies demonstrate: (1) Photofluorography is a relatively efficient tool for tuberculosis case finding. (2) All photofluorograms should be interpreted independently by two competent interpreters. (3) The activity of a lesion can not be determined from a single roentgenogram. Hence, intensive follow-up is indicated for all cases.

10:40—The Use of Miniature Film as a Diagnostic Technique in Heart Disease—William Paul Thompson, M.D., Los Angeles, and Joseph Jellen, M.D., Los Angeles.

Cardiac measurement is possible and distortions of shape are reproduced in miniature films. New cases of cardiac disease may be found by this radiologic method, but many cases will be overlooked unless the technique is broadened to include history, physical examination and electrocardiogram.

11:00—Discussion by Howard F. West, M.D., and L. Henry Garland, M.D., San Francisco.

Tuesday, April 13, 9:00 A.M., Rooms 214-217, St. Francis Hotel

Joint Meeting with General Practice

9:00—The "Laboratory" in the Diagnosis of Communicable Diseases—Malcolm H. Merrill, M.D., Berkeley.

The place of the "laboratory" in the diagnosis of such communicable diseases as typhoid, syphilis, diphtheria, and viral and rickettsial diseases will be reviewed. The type of specimens to be submitted and where they may be sent in California will be noted. Common errors in the use of available laboratory services will be pointed out. (Editorial note: Does the author mean *clinical pathologist?*)

9:20—Discussion by A. G. Foord, M.D., Pasadena.

9:30—Q Fever in California—Edwin H. Lennette, M.D., Berkeley, by invitation.

The history of Q fever is briefly summarized. Observations made on an outbreak of the disease which occurred in California in 1947 are presented, and the etiology, epidemiology, symptomatology, and diagnosis are discussed.

9:50—Discussion.

10:00—A General Practitioner Looks at the Health Department—Roswell L. Hull, M.D., Hollister.

The increasing importance of general practice and public health during the last decade. The development of better medical standards and care through cooperation. What the general practitioner should expect of public health and his failure at times to support and understand the modern public health program. Consequences of a failure thereof.

10:20—Discussion.

10:30—Practical Aspects of Electrocardiography—Francis Chamberlain, M.D., San Francisco.

11:00—Discussion.

11:10—Diabetes, Control Objectives—Hugh L. Wilkerson, M.D., Boston, Mass.

11:30—Discussion.

Tuesday, April 13, 1:15 P.M., Empire Room, Sir Francis Drake Hotel

Joint Meeting with General Medicine

For Program, see Section on General Medicine

SECTION ON RADIOLOGY

Douglass R. MacColl, M.D., Los Angeles, *Chairman*
Sydney F. Thomas, M.D., Palo Alto, *Secretary*

DOUGLASS R. MacCOLL
Chairman, Radiology

SYDNEY F. THOMAS
Secretary, Radiology

Sunday, April 11, 2:00 P.M., Borgia Room, St. Francis Hotel

2:00—The Use of the Rapid Film Changer in Vascular Disorders and the Recording of Rapid Physiological Movements—Charles Duisenberg, M.D., San Francisco, by invitation.

The rapid film changer has been used primarily in angiocardiography. Little use has been made of its principles in contrast visualization of peripheral blood vessels, cerebral angiography, aortography, arterio-venous fistulas, and for the recording of rapid movements of hollow organs. Examples are shown of the advantages of using the film changer, instead of single or a few exposures for the demonstration of systems and conditions described above.

2:20—Discussion by Earl R. Miller, M.D., San Francisco.

2:30—Spontaneous Pneumoperitoneum—Walter Stilson, M.D., and Otto Neufeld, M.D., Los Angeles.

Brief review of literature on spontaneous pneumoperitoneum, especially idiopathic. Etiology and clinical significance; x-ray findings with special attention to those associated with massive pneumoperitoneum. Another case of spontaneous pneumoperitoneum without demonstrable cause will be added to the literature of the few previously reported cases.

2:50—Discussion by L. Henry Garland, M.D., San Francisco.

3:00—Myelography, An Evaluation—Charles Grayson, M.D., and Howard Black, M.D., Sacramento.

The value and accuracy of myelography in herniated disc is discussed and illustrated by a number of examples.

3:20—Discussion by James Irwin, M.D., San Diego.

3:30—The Significance of the Electrokymograph—Frederick G. Gillick, M.D., and William F. Reynolds, M.D., San Francisco, by invitation.

The electrokymograph records on ECG paper by means of a multiplier photo-tube, galvanometer, and camera the variations in intensity of an x-ray beam falling on a strip of fluorescent screen. Characteristics of motion and density variations of certain organs, such as the heart, etc. can be recorded for subsequent analysis. Other normal and abnormal areas in the body may be similarly studied. The instrument is described and the mechanism of the production of the records is discussed. Possible errors in interpretation are indicated.

3:50—Discussion by S. F. Thomas, M.D., Palo Alto.

4:00—Recess: Business Meeting and Election of Officers.

4:10—Dysplasia of the Hip: A Factor in the Development of Static Osteoarthropathy—Joseph Levitin, M.D., San Francisco.

In dysplasia of the hip, there is a shallow acetabulum. The extreme of this flattening results in a congenital dislocation. There is a genetic background. The changes that occur in the femoral head and neck are often misdiagnosed as an end result of an old epiphyseal slip or Perthes'. The flattened acetabulum gives a poor structural hip. Stress micro-trauma may result in osteoarthropathy.

4:30—Discussion by A. A. de Lorimer, M.D., San Francisco.

Monday, April 12, 9:00 A.M., Curran Theater

Joint Meeting with Sections on General Medicine, General Surgery, and Pathology

For Program, see Section on General Medicine

Monday, April 12, 2:00 P.M., Borgia Room, St. Francis Hotel

2:00—**Rheumatoid Spondylitis**—A. Justin Williams, M.D., San Francisco.

Presentation of the early "characteristic" x-ray findings with particular reference to the changes in the costal articulations and their possible causation of thoracic and abdominal symptomatology. Discussion of the technical procedures necessary for satisfactory demonstration of these joints.

2:20—Discussion by Edward W. Boland, M.D., Los Angeles.

2:30—**Roentgen Therapy of Rheumatoid Spondylitis**—Nathan M. Spishakoff, M.D., San Francisco.

Presentation of the treatment method of rheumatoid spondylitis, as developed at U. C. Hospital, with a discussion of physical factors, indications, contraindications, complications, and results obtained in the series of cases treated since 1943.

2:50—Discussion by Hans Waine, M.D., San Francisco.

3:00—**Treatment of Tinea Capitis**—Harold A. Hill, M.D., and Martha E. Mottram, M.D., San Francisco.

The authors discuss methods of roentgen therapy for tinea capitis. They outline a relatively simple method of treatment and compare their results with those obtained by more elaborate techniques. They summarize the results in over one hundred cases. The absence of complications on follow-up is stressed. (Lantern Slides.)

3:20—Discussion by H. V. Allington, M.D., Oakland.

3:40—**Radiation Lesions of the Bowel**—Ralph F. Niehaus, M.D., and M. D. Redding, M.D., San Diego.

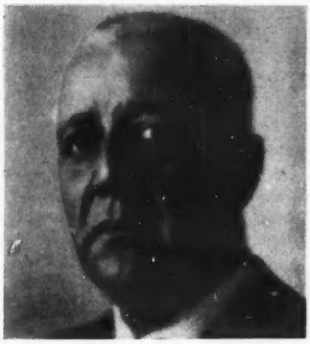
Review of 98 cases of carcinoma of the cervix seen 1943 through 1946. Clinical, pathologic, protoscopic, and roentgen appearance of both early and late radiation lesions of the bowel are described. (Lantern and Kodachrome slides.) Treatment and differential diagnosis will be discussed.

4:00—Discussion by William E. Costolow, M.D., Los Angeles.

4:10—Recess—Meeting of Pacific Roentgen Ray Society.

SECTION ON UROLOGY

Lionel P. Player, M.D., San Francisco, *Chairman*
Nathan G. Hale, M.D., Sacramento, *Vice-Chairman*
Frederick A. Bennetts, M.D., Los Angeles, *Secretary*



LIONEL P. PLAYER
Chairman, Urology

FREDERICK A. BENNETTS
Secretary, Urology

Monday, April 12, 9:00 A.M., Franciscan Room, Sir Francis Drake Hotel

9:00—**Common Skin Diseases of the External Genitalia**—Julius H. Winer, M.D., and Louis H. Winer, M.D., Beverly Hills.

9:20—Discussion by Rees B. Rees, M.D., San Francisco.

9:30—**Diagnosis and Management of Acute Scrotal Enlargements**—Lloyd R. Reynolds, M.D., Thomas L. Schulte, M.D., and Howard J. Hammer, M.D., San Francisco.

9:50—Discussion by Lyle G. Craig, M.D., Pasadena.

10:00—**A Surgical Approach to the Problem of Intractable Incontinence in the Female**—Milton O. Zucker, M.D., and Lysle O. Shaw, M.D., South Gate.

A new approach to the problem of intractable incontinence in the female, based on the development of a "pseudo" urethral tube fashioned from a tongue of bladder tissue and covered by full thickness abdominal wall graft, by closure of a natural urethral orifice.

10:20—Discussion by R. Glenn Craig, M.D., San Francisco.

10:30—**Tumors of the Spermatic Cord**—Presentation of Two Cases—Jesse L. Brockow, M.D., and Glen H. Gummess, M.D., Los Angeles.

Two cases, one primary mesothelioma of the spermatic cord, and the other a teratoma of the cord and testicle. The primary site was not determined, but the case is presented because of its unusual spread.

10:50—Discussion by Jay J. Crane, M.D., Los Angeles.

11:00—Reno-Colic Fistula—H. Verrill Findlay, M.D., Santa Barbara.

11:20—Discussion by Frank Hinman, M.D., San Francisco.

11:30—Urethral Diverticulum in Women—Case Report—Harry A. Zide, M.D., Beverly Hills.

Treatment consists of excising the diverticulum with contained calculi, which usually cures not only the diverticulum, but also the associated urinary infection.

11:50—Discussion by Dudley P. Fagerstrom, M.D., San Jose.

Monday, April 12, 2:00 P.M., Curran Theater

Joint Meeting with Sections on General Practice, Pediatrics, and General Medicine

For Program, see Section on General Medicine

Tuesday, April 13, 9:00 A.M., Empire Room, Sir Francis Drake Hotel

9:00—Operation for Hypospadias with Moving Picture Demonstration—Arthur B. Cecil, M.D., Los Angeles.

9:40—Discussion by Donald R. Smith, M.D., San Francisco.

10:00—Radium as an Adjunct, in the Transurethral Treatment of Cancers of the Prostate and Bladder—James R. Dillon, M.D., San Francisco.

A radium holding catheter was devised 25 years ago, recently modified and improved by Dr. Ford Shepard and later by Dr. C. E. Duisenberg. Brief summary of cases illustrative of its use, benefits and dangers.

10:20—Discussion by Lloyd Kindall, M.D., Oakland.

10:30—Non-Surgical Treatment of the Patient with Mild Prostatism—Roger W. Barnes, M.D., Los Angeles, and Claire E. Heitman, M.D., Los Angeles, by invitation.

10:50—Discussion by Edward W. Beach, M.D., Sacramento.

11:00—Dietary and Occupational Considerations in the Treatment of Urogenital Disorders—Carl E. Burkland, M.D., Sacramento.

A discussion of different dietary measures as adjuncts in the treatment of irritative and inflammatory conditions of the urogenital tract and in the prevention of the recurrence of urinary calculi.

11:20—Discussion by Henry M. Weyrauch, Jr., M.D., San Francisco.

Tuesday, April 13, 1:30 P.M., Green Room, St. Francis Hotel

1:30—Chairman's Address—Lionel P. Player, M.D., San Francisco. Presentation of 21-Year-Old Male, 17 Years After Removal of Malignant Adrenal Tumor Which Had Caused Sexual Precocity.

Comments by Hans Lisser, M.D., San Francisco, at request of Chairman.

Sexual precocity in boys falls into three categories: (1) Hereditary transmission; (2) Following measles, mumps, whooping cough, encephalitis—in the region of the fourth ventricle; and (3) Of endocrine origin; due to lesion, tumor of either adrenal cortex, testicle, or pineal gland.

2:15—Discussion.

2:30—Business Recess.

2:40—Business Meeting and Election of Officers.

Wednesday, April 14, 2:00 P.M., Green Room, St. Francis Hotel

2:00—Malignancy of the Improperly Descended Testicle—Frederick C. Schlumberger, M.D., Beverly Hills.

Two cases are described in which carcinoma of the testicle developed following surgical correction of the malposition. A brief resume of the case records of several patients with the diagnosis of Improperly Descended Testicle and Tumors of the Testicle. Re-evaluation of the management of this condition.

2:20—Discussion by Thomas Gibson, M.D., San Francisco.

2:30—Essential Hypertension Associated with Unilateral Renal Disease. A Report of Four Cases—McCleery Glazier, M.D., Los Angeles, and James Whisenand, M.D., Los Angeles, by invitation.

Theories of the mechanism of essential hypertension with particular reference to the renal influences in the production of this disease. Four cases of essential hypertension associated with unilateral renal disease.

2:50—Discussion by William J. Kerr, M.D., San Francisco.

3:00—Streptomycin in Treatment of Tuberculosis and Mixed Infections of the Genito-Urinary Organs—Francis H. Redewill, M.D., San Francisco, and James E. Potter, M.D., Palm Springs.

A report of twenty-one cases. (Lantern Slides.)

3:20—Discussion by Gilbert J. Thomas, M.D., Beverly Hills.

3:30—Bilateral Renal Calculi—Clyde W. Collings, M.D., Los Angeles, and Ivan E. Martin, M.D., Los Angeles, by invitation.

A review of results during the past decade in dealing with this perplexing problem at Medical School, College of Medical Evangelists. Elective surgery and conservative treatment will be discussed.

3:50—Discussion by Roger W. Barnes, M.D., Los Angeles, and Robert J. Prentiss, San Diego.

4:00—Cyst of the Seminal Vesical—B. Lyman Stewart, M.D., and Gordon A. Nicoll, M.D., Los Angeles.

The origin, pathology, symptoms and treatment is described with a brief summary of the current literature. A case report is presented illustrating certain features of the symptoms, diagnosis and treatment.

4:20—Discussion.

INDEX TO SPEAKERS

San Francisco, April 11-14, 1948

C. M. A. Cancer Commission
Pre-Convention Conference

MARK HOPKINS HOTEL

APRIL 10, 1948

The preconvention conferences sponsored by the Cancer Commission will be held at the Mark Hopkins Hotel on April 10, on the day preceding the opening of the California Medical Association meeting.

PATHOLOGY. Golden Empire Room

The preconvention conference on Histopathology will be held from 9 a.m. to 4 p.m. under the chairmanship of Dr. Ernest M. Hall. Tumor diagnostic problems will be presented and discussed. Members who will attend this conference are requested to bring their own microscopes and to register now with Dr. Warren Bostick, U. C. Hospital, San Francisco 22.

RADIOLOGY. Argonaut Room

The preconvention conference on Radiology will be held at 9:30 a.m. The chairman of this section is Dr. Albert K. Merchant, Dameron Hospital, Stockton. The secretary is Dr. Henry L. Jaffee, Beverly Hills.

EVENING CONFERENCE

The Cancer Commission Dinner will be held at 6:30 p.m., at the Mark Hopkins Hotel, for members of the Cancer Committees of the County Medical Societies. Interested physicians are invited. Make reservations with Dr. O. N. Meland, 1407 S. Hope Street, Los Angeles, or Dr. David A. Wood, 54 Commonwealth Avenue, San Francisco. $5.00 per plate.

Immediately following the dinner there will be a Clinical Conference with presentation of patients before a "Model Tumor Board." Dr. James M. Marshall, Pasadena, is chairman, and Dr. Otto Pflueger, San Francisco, is secretary. Dr. Marshall has selected the members for the Consultative Tumor Board.

California Heart Association

ANNUAL MEETING

Marine Memorial Theater, Mason and Sutter Streets

Tuesday Afternoon, 2.00 P.M., April 14, 1948

Presiding: SAMUEL J. MCCLENDON, M.D., President, California Heart Association, and FRANCIS L. CHAMBERLAIN, M.D., Chairman, Program Committee

PANEL DISCUSSION: RECENT ADVANCES IN TREATMENT AND DIAGNOSIS OF HEART DISEASE

2:00—Recent Advances in Treatment of Hypertension—William Paul Thompson, M.D., Los Angeles.

2:08—Recent Advances in Treatment of Coronary Disease—John J. Sampson, M.D., San Francisco.

2:16—Recent Advances in Treatment of Rheumatic Fever—George C. Griffith, Pasadena.

2:24—Recent Advances in Treatment of Peripheral Vascular Disease—Norman Freeman, M.D., San Francisco.

2:32—Recent Advances in Surgical Treatment of Heart Disease—John C. Jones, M.D., Los Angeles.

2:40—Recent Advances in Treatment of Bacterial Endocarditis and Luetic Cardiovascular Disease—Salvatore P. Lucia, M.D., San Francisco.

2:45—Recent Advances in Electrocardiography—Hans Hecht, M.D., Salt Lake City, Utah.

2:55—Recent Advances in Diagnosis and Treatment of Functional Heart Disease—Meyer Friedman, M.D., San Francisco.

3:00—Discussion by members of panel of questions submitted in writing from the floor.

3:20—Five-minute intermission.

3:25—A Correlation Between the Pathological and Electrocardiographic Findings in 256 Cases of Fatal Acute Myocardial Infarction—Willard J. Zinn, M.D., and Richard S. Cosby, M.D., Los Angeles.

Concepts of Myocardial Ischaemia—Hans Hecht, M.D., Salt Lake City, Utah.

A Statistical Study of the Etiology and Pathology of 127 Cases of Cor Pulmonale Studied at Autopsy—Sim P. Dimitroff, M.D., Los Angeles.

Practical Value of Determining Propagation of Heart Sounds—William J. Kerr, M.D., San Francisco.

An Analysis of the First Heart Sound in Auricular Fibrillation—David Rytand, M.D., San Francisco.

Evaluation of the Hypertensive Patient—Maurice Sokolow, M.D., San Francisco.

5:15—Annual Business Meeting.

California Society of Internal Medicine

ANNUAL MEETING

5 o'clock, Tuesday, April 13

Empire Room, Sir Francis Drake Hotel

Discussion of the fee schedule questionnaire and election of officers

Western Association of Industrial Physicians and Surgeons

SEVENTH ANNUAL MEETING

The Gold Room, Fairmont Hotel

San Francisco, California

Saturday, April 10, 1948

Annual Business Meeting (members)

8:30-9:00 a.m.

PROGRAM

9:00-9:30 a.m.—President's Address—Dr. William P. Shepard, Third Vice-President, Metropolitan Life Insurance Company, San Francisco, California.

9:30-10:00 a.m.—"Industrial Hygiene and Medicine, Tomorrow Measured By Today"—Dr. Richard C. Walmer, Medical Director, Industrial Hygiene Foundation, Pittsburgh, Pa.

10:00-10:30 a.m.—"The Contribution of the Sciences to Industrial Medicine and Hygiene"—Dr. Francis R. Holden, Research Associate, Radiation Laboratory, U. S. Navy, San Francisco, California, formerly Chief Chemist, Industrial Hygiene Foundation.

10:30-11:00 a.m.—Discussion period for previous three papers.

11:00-12:00 a.m.—"Problems Relative to Possible Physiological Effects Caused by Radiation"—Dr. Fred A. Bryan, associated with the Atomic Energy Project, University of California at Los Angeles, formerly active in the Medical Division of the Manhattan Project. (Accompanied by new sound color film, "Operation Crossroads—Radiological Safety Section."

2:00-2:30 p.m.—"The Doctor's Office in Accident Prevention"—H. K. Lambie, El Cerrito, California, Safety Consultant.

2:30-3:00 p.m.—"Industrial Nursing Today, An Evaluation"—Mrs. Roberta McMahon, R.N., Eitel-McCullough Company, San Bruno, California.

3:00-5:00 p.m.—Symposium—A panel with audience participation discussing the State Compensation Insurance Law, its administration, its procedures, and problems connected therewith.

President, WILLIAM P. SHEPARD, M.D.
c/o Metropolitan Life Insurance Co.
600 Stockton Street
San Francisco 20, California

Secretary, CHRISTOPHER LEGGO, M.D.
c/o C&H Sugar Refining Corp., Ltd.
Crockett, California

ROOM	SUNDAY APRIL 11		MONDAY APRIL 12		TUESDAY APRIL 13		WEDNESDAY APRIL 14	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
CURRAN THEATER	**10:00** General Meeting	**2:00** General Medicine General Surgery General Practice Obstetrics and Gynecology Public Health	**9:00** General Medicine General Surgery Pathology and Bacteriology Radiology	**1:40** General Medicine General Practice Pediatrics Urology	**9:00** General Meeting and Clinical Pathological Conference	**2:00** General Surgery General Practice Industrial Medicine and Surgery Neuropsychiatry	**9:00** General Meeting "What's New"	
ST. FRANCIS HOTEL Green Room		**2:00** Industrial Medicine and Surgery	**9:00** Industrial Medicine and Surgery	**2:00** Eye, Ear, Nose and Throat	**9:00** Eye, Ear, Nose and Throat	**1:30** Urology		**2:00** Urology
Borgia Room		**2:00** Radiology	**9:00** Public Health	**2:00** Radiology	**9:30** Dermatology and Syphilology	**2:00** Dermatology and Syphilology Eye, Ear, Nose and Throat	**9:00** Dermatology and Syphilology	
Rooms 214-217		**2:00** Neuropsychiatry		**2:00** Neuropsychiatry	**9:00** General Practice Public Health			
Room 261		**2:00** Pathology and Bacteriology	**9:00** Obstetrics and Gynecology	**2:00** Pathology and Bacteriology		**2:00** Obstetrics and Gynecology		
Room 210		**2:00** Pediatrics	**9:00** Pediatrics	**2:00** Anesthesiology	**11:00** Anesthesiology			
Room 220		**1:30** Anesthesiology						
SIR FRANCIS DRAKE HOTEL Empire Room			**9:00** General Practice		**9:00** Urology	**1:15** General Medicine and Public Health		**2:00** Postgraduate Training and Medical Economics
Franciscan Room			**9:00** Urology					

HOUSE OF DELEGATES MEETS SUNDAY AND TUESDAY AT 6:30 P.M. IN THE EMPIRE ROOM, HOTEL SIR FRANCIS DRAKE
COUNCIL OF THE C.M.A. MEETS DAILY AT 7.30 A.M. IN ROOM 220, HOTEL ST. FRANCIS

WOMAN'S AUXILIARY

to the

CALIFORNIA MEDICAL ASSOCIATION

EIGHTEENTH ANNUAL CONVENTION

Headquarters, Mark Hopkins Hotel

MRS. NORMAN D. MORGAN
President

MRS. LAWRENCE GUNDRUM
President-Elect

Convention Chairman, MRS. KEENE O. HALDEMANN

REGISTRATION

Sunday, April 11, 9:30-12 noon, 2:30 p.m.-4:00 p.m.

Monday, April 12, 9:00 a.m.-4:30 p.m.

Tuesday, April 13, 9:00 a.m.-12 noon

SUNDAY, APRIL 11

8:00 a.m.—Executive Committee Meeting—President's Room.

10:00 a.m.—Opening Session of the California Medical Association. Progress Report by the President of the Auxiliary. All Auxiliary members and Doctors' wives are invited to attend.

10:30 a.m.—Pre-Convention Board Meeting—Room of the Dons, Mark Hopkins Hotel.

MONDAY, APRIL 12

9:30 a.m.—First Session of the Eighteenth Annual Convention—Room of the Dons, Mark Hopkins Hotel.

12:30 p.m.—Luncheon honoring the State President, the President-Elect, and Past Presidents, members of the Advisory Council—Peacock Court, Mark Hopkins Hotel.

7:30 p.m.—California Medical Association Annual Banquet honoring the President.

TUESDAY, APRIL 13

9:30 a.m.—Second Session of the Eighteenth Annual Convention—Room of the Dons, Mark Hopkins Hotel.

12:00-1:00 p.m.—Post-Convention Board Meeting.

12:00-1:00 p.m.—School of Instruction for new County Presidents, Officers, and Committee Chairmen.

4:00-6:00 p.m.—Tea honoring the wife of the President of the California Medical Association—Regency Room, Huntington Hotel.

Technical Exhibits

The Association is fortunate in having a well-rounded technical exhibit to offer those attending the 1948 Annual Session. Exhibits will be found in the Colonial and Italian Rooms of the St. Francis Hotel, on the mezzanine floor adjacent to the registration desk.

Members are reminded that the technical exhibitors pay the Association for the privilege of participating in the exhibit and that the funds from this source are entirely applied to the cost of the meeting. This makes it possible for the Association to conduct a large Annual Session without the need of charging a registration fee or increasing your dues to cover the expense.

You may show your appreciation of this valuable contribution by attending the exhibits, visiting and registering with the exhibitors and letting them know they are more than welcome at the meeting. From the scientific point of view, the exhibitors will have on display the latest in therapeutic and diagnostic agents, a display which is not possible to find similarly assembled except at a meeting of this type.

All exhibitors are listed below, with their locations. On the following pages is an alphabetical listing which gives a brief description of the products and services displayed for your information and convenience.

About the Exhibitors

ABBOTT LABORATORIES — **Green Room Foyer**
North Chicago, Illinois

You are most cordially invited to visit the display prepared for this meeting. Abbott Professional Service Representatives in attendance will welcome discussion of the new developments in the antibiotic, anticonvulsant, allergenic, anesthetic, sulfonamide, hematinic, hormone, vitamin and other fields.

A. S. ALOE COMPANY — **Italian Room**
Los Angeles

We shall exhibit the new Aloe Short Wave, with crystal control, which has been designed to conform to the F.C.C. Rules, as well as our substantial line of instruments and equipment for the medical office. Steeline Examining and Treatment Room equipment will be on display, and its construction has been refined and improved through its production in our new modern factory covering over one hundred thousand square feet of floor space.
Latest instruments for use in the Doctor's laboratories will also be displayed and a cordial invitation is extended to the members to visit our display in Booth No. 35.

THE BAKER LABORATORIES, Inc. — **Colonial Room**
Cleveland, Ohio

The Baker display is built around the six-step approach to optimum infant nutrition which leads to the picture of the happy mother and the healthy child. An adjusted protein, two carbohydrates, a modified fat, vitamins, soluble mineral salts and iron, coupled with simplicity of preparation and low cost, provide for complete nutrition and insure cooperation in the home. Baker's Modified Milk, liquid or powder, may be used interchangeably from birth to the end of the bottle-feeding period. May we discuss your infant feeding problem with you?

BARNES-HIND LABORATORIES, Inc. — **Colonial Room**
San Francisco

The Barnes-Hind Laboratories cordially invite physicians to visit our exhibit where there will be displayed many of our well-known pharmaceutical preparations, as well as some of our newer developments in pharmaceutical buffers, contact lens solutions and amino acid products.

DON BAXTER, Inc. — **Colonial Room**
Glendale

Present-day concepts of parenteral therapy and blood banking will be presented by Don Baxter, Inc., Glendale 1, California; Mr. J. L. Sweeny in charge. Of particular interest will be the new Isotonic Solution of Sodium Sulfate, the new V-14 *Vacoset*, irradiated plasma, and new blood transfusion equipment.

BILHUBER-KNOLL CORP. — **Colonial Room**
Orange, New Jersey

For information on the latest developments of the medicinal chemicals of Bilhuber-Knoll Corp. visit Booth No. 31. Your discussions will be welcomed on Oenethyl—their new vasopressor; Octin—antispasmodic; Metrazol—analeptic and antianoxiant; Theocalcin—diuretic and myocardial stimulant and Dilaudid—analgesic and cough sedative. These and their other dependable prescription chemicals are prescribed alone or in combinations with other drugs as the individual patient may require.

THE BORDEN COMPANY — **Green Room Foyer**
New York, New York

Spend a few pleasant moments with Mr. I. Eugene Symonds and Mr. Shupps and refresh your memory on our Prescription Products. Meet Biolac, a liquid modified milk for infant feeding; Mull Soy, a liquid hypoallergenic soy food for your milk allergic patients; Dryco with its high-protein, low fat content for formula control; powdered whole milk, Klim; the improved milk sugar, Beta Lactose, for carbohydrate supplementation; and the powdered Merrell-Soule Protein and Lactic Acid milks for special infant feeding cases.
We particularly invite your attention to Gerilac, a new vitamin-fortified powdered milk for well-rounded nutrition in convalescence, pre- and post-operative diets, soft and liquid diets, pregnancy and lactation, geriatrics, et al.

BRISTOL LABORATORIES, Inc. — **Colonial Room**
Syracuse, New York

Bristol Laboratories, Inc.'s exhibit will be devoted to the display of many of its antibiotic and pharmaceutical products. Some of these products are: the 10 cc. Vial of Crystalline Sodium Penicillin G in Oil and Wax in the new liquid form; Penicillin Vaginal Suppositories; Alminate Tablets, Bristol's brand of aluminum dihydroxy aminoacetate for the management of peptic ulcer, gastritis and hyperacidity and Barbonate Tablets, a companion product containing Alminate with the combination of phenobarbital and belladonna alkaloids to give it an antispasmodic and sedative action; Palapent, a palatable elixir of pentobarbital Sodium, U.S.P., an excellent prescription vehicle.

BURROUGHS WELLCOME & COMPANY
New York, New York — **Colonial Room**

Among significant products featured will be "Wellcome" Globin Insulin, which provides an action which is timed to be more suitable for the average diabetic; "Tabloid" "Emperin" Compound with Codeine Phosphate gr. 1, No. 4, for relief of severe pain; "Nutragest," the palatable dietary compound containing pre-digested proteins (amino

acids and polypeptides), carbohydrates; and "Methedrine," a recent sympathomimetic drug of wide therapeutic application.

BUSH ELECTRIC COMPANY — **Colonial Room**
San Francisco

As agents for the Burdick Corporation and the X-Ray Division of the George W. Borg Corporation, we shall exhibit Burdick's new X-85 Short Wave Diathermy—the first Diathermy to receive Certificate of Approval of the Federal Communications Commission; Acceptance of the American Medical Association and Approval of the Underwriters' Laboratories. We shall also display a 1948 Model Combination Radiographic & Fluoroscopic X-Ray Unit and the Borg X-Ray line. Northern California Physicians are urged to visit this exhibit and investigate the facilities available in the Electro-medical field by the Bush Electric Company of San Francisco.

CAMEL CIGARETTES — **Green Room Foyer**
New York, New York

Camel Cigarettes will exhibit a large detailed photograph showing the calculated absorption of nicotine from cigarette smoke in the human respiratory tract. Representatives will be on hand to discuss any phase of the physiological effects of smoking.

S. H. CAMP & COMPANY — **Italian Room**
Jackson, Michigan

A series of illuminated transparencies depicting anatomical conditions before and after application of Camp Anatomical Supports will be displayed. Experts in attendance will answer questions pertaining to the scientific application of Anatomical Supports and advise regarding the availability of them in Authorized Service Departments throughout the country.

CARNATION COMPANY — **Colonial Room**
Los Angeles

Carnation Company, Los Angeles, California. You are invited to visit Booth No. 20, where you will see an attractive display on Carnation Evaporated Milk—"the milk every doctor knows." Some valuable information on the use of this milk for infant feeding, child feeding, and general diet will be presented and the method by which Carnation is generously fortified with pure crystalline Vitamin D—400 U.S.P. units per reconstituted quart—will be explained. Interesting literature will also be available for distribution.

CIBA PHARMACEUTICAL PRODUCTS, Inc.
Summit, New Jersey — **Colonial Room**

The Ciba exhibit of "Economical Hormone Therapy," features *Metandren* Linguets, the most potent oral androgen in tablets, designed for absorption through sublingual mucosa; *Lutocylol* Linguets, orally effective progestogen, especially designed for sublingual absorption; and *Ethinyl Estradiol*, the most potent oral estrogen.
Representatives in attendance will gladly furnish literature and answer questions about these and other Ciba products.

COCA-COLA COMPANY — **Green Room Foyer**
Atlanta, Georgia

Ice-cold Coca-Cola will be served the delegates through the joint cooperation and courtesy of The Coca-Cola Bottling Company of California, San Francisco, and The Coca-Cola Company.

COMMERCIAL SOLVENTS CORPORATION
New York, New York — **Colonial Room**

The Commercial Solvents Corporation exhibit will feature among its pharmaceutical products the new Soluble Tablets Crystalline Penicillin C.S.C. which represent a significant advancement in penicillin therapy. Also on display will be the new C.S.C. Permanent Metal Syringe and the C.S.C. Disposable Syringe for the administration of penicillin in oil and wax.

CUTTER LABORATORIES — **Italian Room**
Berkeley

The Cutter Laboratories exhibit in Booth No. 48 will be centered around an unusual mechanical book display. The complete line of pediatric products including our triple vaccine, DipPertTet, Plain and Aluminum Hydroxide Absorbed; Blood Fractions, including Immune Serum Globulin for measles modification, Albumin and Hypertussis; and Intravenous Solutions and Saftiflasks including our KNL Solution will be available. Won't you stop in and see us?

F. A. DAVIS COMPANY — **Colonial Room**
Philadelphia, Pennsylvania

Following is a partial list of new books and new editions which will be on display at Booth No. 19. Drop in and look them over: Arthritis—Bach; Gall Bladder Diseases—Behrend; Clinical Tuberculosis—Goldberg; Reparative and Reconstructive Surgery—May; Dermatology—Greenbaum; Ear, Nose and Throat—Lederer; Clinical Radiology—Pillmore; Pediatric Therapy—Litchfield and Dembo; Rhinoplasty—Maliniac; Diagnostic Signs—Robertson; Pre and Postoperative Care—Tourish and Wagner; Gonioscopy—Troncoso; Cyclopedia of Medicine, Surgery and Specialties—Piersol and Bortz; Medical and Physical Diagnosis—Loewenberg; Pediatric Progress—Litchfield and Dembo; Textbook of Ear, Nose and Throat—Lederer and Hollender; Clinical Cystoscopy—McCrea.

DAVIS & GECK, Inc. — **Colonial Room**
Brooklyn, New York

Davis & Geck, Inc., manufacturers of sterile surgical sutures, will present an armamentaria of suture-needle combinations specifically prepared for every type of surgery. Mr. W. Morris Thomas, representative of the company, will be in attendance. Literature and technical information on sutures and wound healing will be available. This will include the D&G Manual, reprints and monographs as well as leaflets dealing with the development and improvement of D&G sutures.

EATON LABORATORIES, Inc. — **Italian Room**
Norwich, New York

The Eaton Laboratories, Inc., of Norwich, New York, will exhibit several pharmaceutical preparations of interest to the Medical Profession.
Furacin Soluble Dressing containing a new chemotherapeutic agent Furacin (brand of nitrofurazone) will be exhibited. This compound is a new antibacterial agent recently accepted in New and Non-official Remedies.
Furacin Solution, a new vehicle for Furacin, will also be exhibited. This new liquid vehicle for Furacin has been compounded at the request of many clinicians for use in conditions where the soluble dressing is inconvenient or contraindicated.
Aspogen, a new antacid for the treatment of peptic ulcer will be exhibited.
Our representatives will be very pleased to discuss these products with all who register at the Eaton booth. The latest professional literature and samples will be available.

C. B. FLEET CO., Inc. — **Italian Room**
Lynchburg, Virginia

C. B. Fleet Co., Inc., cordially invites you to Booth No. 36 where it is proud to exhibit Phospho-Soda (Fleet), the one product of its manufacture. Phospho-Soda (Fleet) has come to occupy a significant position wherever sodium phosphates or other salines are indicated. It is a pure, stable, aqueous concentrate of the two U.S.P. Sodium Phosphates with a history of more than fifty years of manufacture and ethical distribution. Should you not be thoroughly acquainted with Phospho-Soda (Fleet), the representative at the booth will discuss with you the chemistry, advantages and possible application of Phospho-Soda (Fleet) in your practice.

GENERAL ELECTRIC X-RAY CORP.
Chicago, Illinois — **Green Room Foyer**

General Electric X-Ray Corp. will exhibit the latest in x-ray and electromedical equipment and supplies.

GERBER PRODUCTS CO. **Colonial Room**
Oakland

Gerber Products Company extends a cordial invitation to you to visit its exhibit of Strained Foods, Junior Foods and Pre-cooked Cereals at Booth No. 15. Recent revisions of their service literature will be displayed.
Your special attention is called to the display of the new Gerber Meats for Babies. Varieties include Beef, Liver and Veal in both strained and chopped forms.

GOLDEN STATE CO., Ltd. **Colonial Room**
San Francisco

Golden State Dairy Products will feature an exhibit displaying their catering ice cream, homogenized milk, cottage cheese and butter, sampling doctors with these products and distributing literature to further demonstrate the great nutritional values of dairy products in the diet. The theme of the exhibit will be "You Strike It Rich In Golden State Products" which is not only the company slogan but ties in with the current three-year Centennial Celebration.

GUILDCRAFTERS OF HOLLYWOOD
Hollywood **Green Room Foyer**

Art metalwork in the form of plaques. The designs are insculptured, the lettering engraved. Quotations, Oath of Hippocrates, etc. Awards for outstanding service. Medical Fraternities and Honor Societies certificates in metal. Push buttons in chrome, bronze and brass for home and office. Special desk, wall and outdoor signs. Maker of the plaques for the Past Presidents of the California Medical Association.

HOFFMAN-LA ROCHE **Colonial Room**
Nutley, New Jersey

Roche is happy to exhibit at the meeting of the California Medical Association. They invite members of the Association to visit Booth No. 21 where members of the Roche special representatives staff will be present to discuss several new additions to the Roche line of specialties. These include: Syrup Sedulon, a sedative cough preparation; Thephorin, a new treatment for allergic disorders; Rayopake, a new radiopaque contrast medium; and other products of interest to members of the profession.

HOLLAND-RANTOS COMPANY, Inc. **Colonial Room**
New York, New York

Koromex Jelly and Koromex Cream will be featured at Booth No. 5. You may recall it was the Holland-Rantos Company, Inc., that pioneered the introduction of modern contraceptive technique—so frequently referred to as *the Koromex Method.* The medical background and clinical use of Koromex Jelly dates back to 1925. Medical service representatives will be on hand to discuss with interested physicians the latest data on Koromex Jelly and Cream.

JUNKET BRAND FOODS **Italian Room**
Little Falls, New York

The importance of rennet in infant and adult nutrition and the value of rennet desserts in both normal and restricted diets will be explained. Enlarged photos illustrate the action of the rennet enzyme in producing softer, finer, more readily-digestible milk curds. Free literature is available describing dietary applications of rennet products. All physicians will be presented with complimentary packages of "Junket" Brand Rennet Powder and "Junket" Brand Rennet Tablets.

KIDDE MANUFACTURING COMPANY, Inc.
Bloomfield, New Jersey **Colonial Room**

In Booth No. 9, the Kidde engineered Utero-tubal Insufflator. Completely safe—insures correct volume and pressure at tolerable limits. Simple operation—one valve, one gauge—requires only small cartridge of Carbon Dioxide gas. Provides diagnostic and therapeutic use of Carbon Dioxide gas or opaque oil as well as permanent record of tests.
Also on display the Kidde Dry Ice Apparatus used in treatment of superficial skin lesions. This apparatus is becoming increasingly popular because of its simplicity and superior cosmetic results obtained.

LEDERLE LABORATORIES **Colonial Room**
New York, New York

The Lederle exhibit will feature purogenated diphtheria, tetanus, and diphtheria-tetanus toxoids, new highly refined antigens characterized by lessened reactivity and antigenic in lower doses, Folvite brand folic acid, a synthetic product useful in certain types of macrocytic anemias, and Cardiolipin, a stable non-nitrogenous phospholipid from beef heart used in tests for syphilis.

ELI LILLY AND COMPANY **Colonial Room**
Indianapolis, Indiana

The Lilly exhibit for 1948 features a presentation of "Dolophine Hydrochloride" (Methadon Hydrochloride, Lilly). You will be interested in the comparison of post-operative relief of pain with "Dolophine Hydrochloride," 10 mg. and Morphine, 15 mg. Many other Lilly products will be on display. Attending Lilly medical service representatives will be present to aid visiting physicians in every way possible.

M & R DIETETIC LABORATORIES, Inc.
Columbus, Ohio **Green Room Foyer**

M & R dietetic Laboratories, Inc., Booth No. 61, will display. Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. C. F. Leffel, R. R. Michael, M. B. Davis, and Miles Engle will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

MALTINE COMPANY **Colonial Room**

MEAD JOHNSON & COMPANY **Italian Room**
Evansville, Indiana

Mead Johnson & Company of Evansville, Indiana, have a display of Infant Diet materials and vitamin products, also several new items of especial interest. Amigen (Mead's)—a pancreatic digest of casein containing amino acids and polypeptides for parenteral or subcutaneous use. Protolysate (Mead's)—an enzymatic digest of casein consisting of amino acids and polypeptides for oral or tube administration. Protenum (Mead's)—a palatable high protein food of low fat content for use as a dietary supplement. Lonolac (Mead's)—for low sodium diets, is nutritionally similar to powdered whole milk but contains only a negligible amount of sodium. Mead's Mixed Vitamin capsules—designed to supplement the diet of expectant and nursing mothers and to augment the vitamin intake of adults. Mead's Polyvitamin Dispersion—to meet the needs of infants and children whose fat absorption is impaired, for the infant to whom the physician wishes to prescribe all the vitamins in a simple form.

THE MEDICAL PROTECTIVE COMPANY
Fort Wayne, Indiana **Italian Room**

The Medical Protective Company's representatives, thoroughly trained in Professional Liability underwriting, invite you to visit exhibit Booth No. 47. They are entirely familiar with the principles of the reciprocal rights and duties of a doctor and patient and with the circumstances peculiar to that relationship. They will be glad to explain how their company meets the exacting requirements of adequate liability protection, which are peculiar to the Professional Liability field.

MERCK & CO., Inc. **Italian Room**
Rahway, New Jersey

Information on the following subjects will be available at the Merck booth: The antibiotic agents—Streptomycin and Penicillin. Neo-Antergan—the new antihistaminic agent of low toxicity. Gold therapy in the treatment of active rheumatoid arthritis. Anesthesia of short duration with Vinethene. Relief of acute attacks in angina pectoris. Treatment of peripheral vascular conditions. Council accepted indications for the vitamins. The Merck repre-

sentatives in attendance will be pleased to supply literature on the above subjects, and also answer questions on the chemotherapeutic agents involved.

THE WILLIAM S. MERRELL COMPANY
Cincinnati, Ohio — **Colonial Room**

Infazyme, the new pleasant-tasting nutrient especially designed for the "sickly" child, will be featured at the Merrell Booth. This latest Merrell Pediatric Specialty combines the essential B vitamins and the whole B complex from liver, rice bran and yeast with readily available iron and supplementary amounts of the essential amino acids. The rich fruity tang of Infazyme represents an unusual taste accomplishment in a preparation containing liver, iron and amino acids. Infazyme is the first concentrated recuperative tonic containing amino acids to be specifically designed for infants and children.

E. S. MILLER LABORATORIES, Inc. — **Colonial Room**
Los Angeles

The E. S. Miller Laboratories, Inc., manufacturers of Pharmaceutical products since 1923 will exhibit a full line of Council Accepted Injectable Solutions, Tablets and Capsules. Especially featured will be their Estrogens and Aminophylline.

C. V. MOSBY COMPANY — **Colonial Room**
San Francisco

New advances in medicine are multitudinous. Most of them are currently covered in the many new Mosby publications. These are available at the Mosby Booth No. 12.

PACIFIC COAST MEDICAL BUREAU AGENCY, Inc.
San Francisco — **Colonial Room**

Are you looking for a new location or association to practice or do you need trained medical assistance? We have registered with us many well qualified physicians in general practice and the specialties, as well as medical secretaries, nurses and technicians. In the event you are not satisfied with your present situation, you might like to review our various openings on the Pacific Coast. We are also licensed Real Estate and Business Opportunity Brokers, specializing in the sales of medical practices, clinics, hospitals, and sanatoria in California. One of our representatives will be very pleased to discuss our services with you.

PARKE, DAVIS & COMPANY — **Italian Room**
Detroit, Michigan

Members of Parke, Davis & Company's Medical Service Staff, fully informed regarding the progress in Pharmaceutical and Biological Research, and desirous of presenting various new advancements to you, will be on hand at our Technical Exhibit to discuss new and old products. Featured, will be such outstanding Specialties as—Benadryl, Vitamins, Adrenalin, Oxycel and Thrombin, Topical. Also, the most recent types of Biologicals, including other therapeutic agents of chemotherapeutic interest, will be displayed. We invite you to visit our exhibit while attending this meeting.

PET MILK COMPANY — **Colonial Room**
St. Louis, Missouri

Pet Milk booth will be staffed by men fully competent to give an accurate description of the fortification of Pet Milk with pure crystalline vitamin D. The new Pet Milk formula selector and solid food guide will be available to any doctors wishing one. The miniature can of Pet Milk will be given to all registrants.

PHILIP MORRIS & CO., Ltd., Inc. — **Italian Room**
New York, New York

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

SANBORN COMPANY — **Colonial Room**
Cambridge, Massachusetts

Exhibit Booth No. 17—The latest Sanborn electrocardiographs including improved models direct-writer and photographic portable cardiettes. Also Sanborn Company's newest metabolism tester which embodies many refinements requested by busy hospitals, clinics and physicians from all parts of the country.

SANDOZ CHEMICAL WORKS, Inc. — **Colonial Room**
San Francisco

This display will feature Mesantoin, a new anticonvulsant for the treatment of epilepsy, D.H.E. 45 (Dihydroergotamine) for the treatment of migraine, and several cardiac glycosides, including Cedilanid, Digilanid, Strophosid and Scillaren.
Well-informed attendants will be present to answer all inquiries and to discuss new products to be released in the near future.

SAN FRANCISCO SURGICAL CO. — **Italian Room**
San Francisco

New 1948 Hamilton Medical Furniture. Sterilizers, Autoclaves, new E.K.G. machine, direct writing; Instruments, Laboratory Supplies; Physiotherapy equipment. Orthopedic Supplies; X-Ray Equipment; Ritter Medical Equipment. Also complete lines of all description, for the medical profession.

SCHERING CORPORATION — **Italian Room**
Bloomfield, New Jersey

Important new hormone and pharmaceutical preparations will be featured at the Schering booth. Micropellets Progynon is a new potent form of the female sex hormone. Combisul and Combisul Liquid are the triple sulfonamide combinations which eliminate the dangers of sulfonamide renal damage. New high potencies of Oreton-M, Pranone and Progynon-B are presented. Schering Professional Service Representatives will welcome you and will be happy to answer your inquiries concerning Schering's new products as well as the older and time-tested hormones, x-ray diagnostic, chemotherapeutic and pharmaceutical preparations.

G. D. SEARLE & CO. — **Italian Room**
Chicago, Illinois

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.
Featured will be Hydryllin, the new antihistaminic, as well as such time-proven products as Searle Aminophyllin in all dosage forms, Metamucil, Ketochol, Floraquin, Kiophyllin, Diodoquin, Pavatrine and Pavatrine with Phenobarbital.

SHARP & DOHME — **Italian Room**
Philadelphia, Pennsylvania

Sharp & Dohme extends a cordial welcome to all visitors at Booth No. 42. Items on exhibit include a new dosage form of "Delvinal" Sodium Vinbarbital for the production of obstetric amnesia and analgesia; new antibiotic preparations including Thyrothricin along with "Sulfathalidine" and "Sulfasuxidine," intestinal bacteriostatic agents.

SICULAR X-RAY CO., Inc. — **Colonial Room**
San Francisco

This exhibit includes a one-tube radiographic and fluoroscopic unit of the latest design and features.

SMITH-DORSEY COMPANY — **Colonial Room**
Lincoln, Nebraska

The Smith-Dorsey Company welcomes the opportunity to greet the physicians of the State of California at their exhibit. Parenteral products of all types will be displayed in addition to specialties of particular interest to the general practitioner. Our representatives will be pleased if you make our exhibit your headquarters during the convention.

SMITH, KLINE & FRENCH LABORATORIES — Colonial Room
Philadelphia, Pennsylvania

Professional representatives will be glad to answer questions and to discuss uses in your own practice of several interesting products among which are: *Dexedrine Sulfate Tablets:* Few therapeutic agents have risen so dramatically and rapidly to pre-eminence as Dexedrine Sulfate. Today, its widespread clinical usefulness in depressive states and weight reduction makes this drug undeniably the central nervous stimulant of choice. Dexedrine is remarkable in that it spares the patient the disturbing consciousness of "drug stimulation," is virtually a "single action" drug, and has an extremely wide margin of safety. *Edrisal:* Edrisal not only affords unusually effective relief from pain, but also—because it contains Benzedrine Sulfate in addition to acetylsalicylic acid and phenacetin—markedly improves the patient's mental outlook; a prime objective in the symptomatic treatment of painful conditions.

SPENCER, INCORPORATED — Colonial Room
New Haven, Connecticut

We cordially invite you to visit exhibit displaying individually designed supports for abdomen, back and breasts. One of the supports featured is the Spencer Spinal Support, designed to aid in the treatment of spinal curvatures, back injuries and diseases, and for wear following spinal operations. Another support shown is the Spencerflex, a light, comfortable support for men which is excellent for postoperative wear. The Spencer Breast Form, designed to conceal disfigurement and restore normal figure lines for patients who have undergone mastectomy, will also be displayed.

E. R. SQUIBB & SONS — Colonial Room
New York, New York

Presenting a wide variety of newly released Squibb preparations for prescription use, among them Liafon, a new hematinic, Pneumococcus Polysaccharides for Active Immunization, Penicillin Soluble Troches 5000 Units, P.O.W. Fluid, Amniotin Suppositories (capsule type), and Diethylstilbestrol Tablets 25 mg.

J. W. STACEY, Inc. — Italian Room
San Francisco

Stacey's, one of the world's famous medical bookstores, will have an interesting display of the new medical books in Booth No. 45. You are cordially invited to see the new texts and monographs recently published in the subjects of your interest.

STAYNER CORPORATION — Borgia Room Foyer
Berkeley

Stayner Corporation of Berkeley again expresses its sincere appreciation to the Western Medical Profession for its splendid support. Your cooperation and confidence have made it possible for us to now manufacture some 120 pharmaceutical products. You are cordially invited to inspect our modern laboratories and to visit our exhibit. Featured at the Stayner booth will be a demonstration of equipment originated to test the Stayner process of "timed-disintegration" Enteric Coated Tablets. Our specially trained representatives will be pleased to discuss our many vitamin specialties and pharmaceutical products with you.

THE STUART COMPANY — Colonial Room
Pasadena

The Stuart Company, Pasadena—Vitamin Products: (1) The Stuart Formula, liquid and tablets, multiple vitamin and iron therapy at the maintenance level. (2) The Stuart Therapeutic Multivitamin, multiple vitamin therapy at the therapeutic level. (3) The Stuart Therapeutic B Complex, C., water-soluble vitamin therapy at the therapeutic level. (4) The Stuart Hematinic, iron, copper, B Complex and C, therapy at the therapeutic level. These four Stuart products can help simplify nutritional prescriptions. Easy to remember—the name and the therapy needed. We hope you will visit the Stuart exhibit, Booth No. 7.

U. S. STANDARD PRODUCTS — Colonial Room
Woodworth, Wisconsin

One of America's oldest Biological houses specializing in government licensed biologicals and quality pharmaceuticals specialties. Rabies Vaccine, Tetanus Toxoids, Diphtheria, and other active immunizing agents.

THE UPJOHN COMPANY — Italian Room
Kalamazoo, Michigan

The central panel of the exhibit symbolizes that man's resistance to stress is being increased by science. The other panels show the effect on the adrenals of various stresses —infection, exercise, surgery, and anoxia. The final panel shows the relative potency of adrenal cortex sterile solution and lippo-adrenal cortex sterile solution.

WALTERS SURGICAL COMPANY — Colonial Room
Los Angeles

WHITE LABORATORIES, Inc. — Colonial Room
Newark, New Jersey

White's Dienestrol Tablets (Council Accepted)—a new orally effective synthetic estrogen is featured. Complete information and literature are available regarding the advantages of Dienestrol's high biologic activity, excellent patient-tolerance and economy.
Other products of White Laboratories are on display and White's Medical Service Representatives in attendance will be pleased to supply any further information requested.

PRE-CONVENTION REPORTS

Officers • Councilors • Committees • County Societies

REPORTS OF GENERAL OFFICERS

REPORT OF THE PRESIDENT

To the House of Delegates:

During the past year, it has been my privilege to serve as your President. In this capacity, I have attended all Council meetings and all but one meeting of the Executive Committee. It has been the duty of the President to represent the Association at numerous public and semi-public meetings.

I have had the opportunity to visit a number of County Societies and some regional meetings of County Societies during the past year. It has been gratifying to observe the almost uniform support given by County Societies and their members to the policies and positive program of the California Medical Association.

The past year has witnessed the failure of a renewed effort to impose Compulsory Health Insurance upon the people and the profession of this State. In spite of the successful conclusion of this issue in the last Legislature, the threat of Socialized Medicine still remains and we can expect renewed attacks in the future. After the close of the recent Legislature, the Governor publicly announced his intention to accomplish the enactment of Compulsory Health Insurance during his present term of office.

As a result of the Public Relations campaign and the Voluntary Health Insurance drive in the past two years, the position of the California Medical Association has been greatly strengthened. We are in far better position to repel legislative efforts to socialize our profession than at any previous time.

This fact does not justify complacency. An active and positive program must be continued if we are to reap the full benefits of the time, effort, and expenditure thus far invested.

The unity of the profession is of paramount importance. Such differences of opinion as may exist among us must be resolved in our own meetings so that we may face our opponents with a unified front.

Respectfully submitted,
JOHN W. CLINE, *President.*

REPORT OF THE PRESIDENT-ELECT

To the President and the House of Delegates:

As President-Elect I have attended the meetings of the Council and Executive Committee and have appeared before various groups and served on committees endeavoring to carry out the policies of the California Medical Association. There are no specific reports to be made from these activities which are not covered in the other official reports.

Respectfully submitted,
E. VINCENT ASKEY, *President-Elect*

REPORT OF THE SPEAKER OF THE HOUSE OF DELEGATES

To the President and the House of Delegates:

There is just one paramount issue before the California Medical Association today: Can we make the voluntary prepayment of the costs of illness sufficiently comprehensive, efficient and attractive to meet the requirements of those who need our services on such a basis? Can we convince an important majority of the public that their dollar will buy more and better real medical care when so expended than when taken from them by taxation and returned as a largess from Sacramento? And can we do it in time?

A large part of the work of the Council, the Executive Committee and of the many special committees required to conduct the Association's affairs is concerned directly or indirectly with this basic issue. Members of the Council and special committees have shown a commendable insight into the many ramifications of this basic problem facing our members. They have been tireless and unselfish in their efforts to effect a solution.

The Association does have a sound, constructive program in medical economics. It has enlisted the services of a most efficient firm of public relations councilors. Its radio feature, California Caravan, heard over the American Broadcasting Company network at 3:00 p.m. on Sundays, has just received the California Parent-Teachers Association award as the outstanding production of 1947. From other sources comes evidence that our efforts are bringing tangible results in terms of improved public sentiment.

Our program can succeed only if and to the extent it is recognized that California is one single state composed of rural areas and metropolitan centers, and that the interests of the physician in Yreka, San Francisco, Los Angeles and National City are essentially the same. All must be represented by one unified state medical association functioning in the interests of every member. In this plan there is no room for the petty provincialism of personal and sectional jealousy.

Respectfully submitted,
L. A. ALESEN, *Speaker*

REPORT OF THE VICE-SPEAKER

To the President and the House of Delegates:

The Vice-Speaker has attended all of the meetings of the State Council and has carried out the special duties assigned to him by the Council and its officers.

Respectfully submitted,
DONALD A. CHARNOCK, *Vice-Speaker.*

REPORT OF THE CHAIRMAN OF THE COUNCIL

To the President and the House of Delegates:

The year ending in April, 1948, has been one which has been a heavy one on the Council. Five Council meetings were

held, plus many meetings of the Executive Committee, and as Chairman of the Council I attended all save one.

Much time was consumed by the Council because of the increase in the number of problems to be attacked and the burdens which must be carried by the Council. An attempt has been made to streamline, somewhat, the work of the Council and numerous and active committees have been appointed during the year to work on special subjects and special projects.

It is hoped that the Committee on Constitutional Changes and Amendments submit a report suggesting changes which may be of value in coordinating and streamlining the work done by the Council.

The Chairman of the Council probably more than anyone else realizes that the amount of work put upon the members of the Council has increased in volume, scope and importance and the desire of the Chairman at this time is to thank all those members who have given so much of their time to this organization.

It is likewise my desire to thank all those in the office of the California Medical Association for their cooperation and untiring efforts.

Respectfully submitted,

EDWIN L. BRUCK, *Chairman of the Council*

Report of the Council

To the President and the House of Delegates:

The Council has held five meetings since the 1947 Annual Session was concluded. These were on May 3, June 21-22, September 20-21, December 21-22, 1947, and February 21-22, 1948. Another meeting is planned for April 10, 1948, and the Council will, according to constitutional requirements, hold daily meetings during the course of the 1948 Annual Session.

The Council calls attention to the fact that its meetings now occupy two days each, which is indicative of the volume of work confronting it. Two-day meetings were inaugurated this year and have been of great assistance in bringing before all Council members every item requiring Council consideration.

Minutes of all Council meetings are printed in digested form in the official journal and all Association members are urged to read them in order to gain a realization and understanding of the business confronting the Association through the Council.

Numerous items have been dealt with by the Council in the past year, some of which are summarized below. Additional items may become apparent before the time of the Annual Session, in which case they will be covered by a supplemental report to be given to the House of Delegates at the time of its convening.

1. *Vacancy on Council.*

On May 3, 1947, Dr. Louis J. Regan of Los Angeles presented his resignation as a Councilor-at-large. Subsequently this vacancy was filled by the unanimous election of Dr. Eugene F. Hoffman of Los Angeles to this position. This vacancy will be presented to the House of Delegates for election of a Councilor-at-large to fill the unexpired term of Dr. Regan, term expiring 1949.

2. *Membership of Association.*

The Council wishes to point out that the membership of the Association at the close of 1947 totaled 8,920 active members, a new record high. At the same time, it is a source of pride that only ten 1946 members were listed as not having paid their 1947 dues at the end of the year. This is less than one-eighth of one per cent and represents a tribute to the value which the members attach to their memberships.

3. *1947 House of Delegates Resolutions.*

The Council has considered all resolutions adopted by the 1947 House of Delegates and a summary of Council actions on such resolutions may be found in the minutes of the 345th Council meeting, held June 20-21, 1947. Members are urged to read these minutes. Specific items among the 1947 resolutions will be discussed individually in following items.

4. *Public Policy and Legislation.*

The Council has been kept fully advised of all legislative activities by Dr. Dwight H. Murray, chairman of the Committee on Public Policy and Legislation, and by Mr. Ben Read, executive secretary of the Public Health League of California. The Council wishes to congratulate Dr. Murray and Mr. Read, together with all others who assisted in the legislative program, for a splendid record of accomplishment during the 1947 legislative session. While not all bills in which the Association was interested received favorable consideration by the Legislature, the record is extremely impressive, particularly as to the overwhelming defeat of measures to establish a compulsory health insurance scheme in California. Credit for this accomplishment, among others, must go to many individuals, all of whom are hereby given the unanimous thanks of the Council for their contributions.

The Council wishes to call attention to the resolution adopted by the 1947 House of Delegates in regard to seeking establishment of a medical examiner system in California to replace the present coroner system. On studying this proposal, the Council found that the coroner, as a public official, is brought into so many activities in all legal codes of the state that an attempt to replace him with a medical examiner system constitutes a major legal and legislative undertaking. Accordingly, it was impossible to prepare and propose such legislation in 1947; instead, the Council called attention to the need of a strong medical examiner system in letters to all county medical societies. The Council is dubious of the ability of the Association to bring about such a legislative change as that contemplated in the 1947 resolution and respectfully directs the attention of the House of Delegates to this matter for such further consideration as the House may wish to give it.

5. *Committee on Medical Economics.*

This committee was empowered by the Council to undertake a study of individual physician-patient relationships, in accordance with a resolution adopted by the 1947 House of Delegates. The committee has reported regularly to the Council and has outlined a study of this subject, the results of which are expected to be placed before the 1948 House of Delegates. Based upon this survey, among other studies, a long-range program of public relations is expected to be developed. The committee deserves the thanks of the Association for its untiring work.

6. *Public Relations.*

During the past year the Council has authorized a continuation of the public relations program carried on for the past two years. This has meant the staging of "Voluntary Health Insurance Weeks" in numerous counties, until only ten counties remain to be covered in this program. This phase of the overall program is expected to be completed early this year, at which time the expense attendant on maintaining a full-time staff of experts will be greatly reduced. The program also includes the publication of the "C.M.A. Public Relations News," a bi-monthly news-type bulletin to acquaint all Association members with the activities of the public relations staff and with current developments in the fields of legislation, prepayment plans and public relations. This publication is regularly sent to a wide list, including Association members, members of the A.M.A. House of Delegates, secretaries of state medical associations and others. Comments from all parts of the country have

been extremely favorable and one territorial medical association has asked to purchase enough copies of each issue to send to its entire membership.

Also continued this past year has been the Association's radio program, "California Caravan." This program has been increased to a 30-minute program on Sunday afternoons and has received favorable comment from many sources. It has been listed by the California Congress of Parent-Teachers Associations as recommended listening for all California school children and has further been recommended by the Los Angeles County School Board for the Peabody award for educational programs. This award, which has not yet been announced, is the equivalent of the Pulitzer prizes given annually in the field of journalism.

In addition to these major items, numerous other matters have been presented to public relations counsel, who has given generously of his time and efforts in their solution and handling.

The Council feels constrained to point out that since the Association's public relations activities were intensified in 1945, a vast change has come over the legislative picture in California. Where the proposals for compulsory health insurance in 1945 made great strides before the Legislature and came close to a record vote on the floor of the Assembly, similar measures introduced in the 1947 legislative session were much more easily handled. A great deal of the credit for this apparent change in legislative sentiment must be attributed to the fact that the public, through the Association's public relations campaign, has been made aware of the fact that health insurance is available on a voluntary basis, without the need of establishing a state-operated bureaucracy.

7. *Revision of Constitution and By-Laws.*

In accordance with a 1947 resolution of the House of Delegates, the Council appointed a committee composed of one member from each Councilor district and one member named by each of the seven largest component county medical societies as a committee to consider revision of the existing Constitution and By-Laws. This committee has held meetings during the year and is expected to render a report to the 1948 House of Delegates. The members of this committee deserve the commendation of the Association for their sincere efforts in this arduous task.

8. *Prepayment Medical Care Plans.*

The Council adopted a resolution on September 20, 1947, reiterating a statement of principles for the operation of voluntary medical care prepayment plans as ethical procedures which was originally adopted in 1945. This resolution calls upon the component county medical societies to consider all prepayment plans in the light of this statement of principles and calls attention to disciplinary procedures available to the county societies in cases of infraction. The Council reprints herewith the 1945 statement of principles and again urges that all county societies and all Association members review these principles with a view toward determining if breaches are evident.

"It is in the public interest that the California Medical Association, representing the doctors of medicine practicing their profession in the State of California, publicly make known the principles which should form the basis of any health insurance program, and from which there should be no material deviation if the public welfare is to be properly and adequately protected. The public health and good medical practice are inextricably interwoven and interdependent.

"This statement is made with the understanding that the public is entitled to the best possible quality of medical service and access thereto. The medical profession must be in a position to render such service if the best interests of the public are to be served.

"The manifold and constant advances in the science and practice of medicine are put to public benefit only when they can be utilized by an alert and progressive medical profession. The public is entitled to profit by all scientific advances and the public welfare demands that the medical profession have complete scientific freedom in their application.

PRINCIPLES

"Any sound health insurance program should fulfill each of the following basic points:

"1. It is of primary importance that the people should be enabled to provide for the costs of illness on a regular budget basis during periods of good health and stable earning power, so that they may have a medical-economic security. It is vital, however, that the distribution of costs should be undertaken in a manner which will still guarantee the finest possible medical care and which will prevent any deterioration in the quality of medical service.

"2. To serve the ultimate public interest any health insurance plan must:

(a) Be voluntary and not compulsory in nature.
(b) Retain individual initiative in medical practice, so that the incentive for further advance in scientific medicine may continue.
(c) Fully protect the freedom of choice, both of the patient in choosing a physician and of the physician in choosing his community, type of practice and professional procedures.
(d) Offer medical care in cooperation with allied services against serious illness or injury.
(e) Offer participation at a cost within the means of all employed persons and income-receiving families, and
(f) Provide a fair reward to those rendering the service which will give continued stimulus to scientific medical development and sound medical practice.

"3. The function of state government should be to encourage voluntary health insurance programs but not regiment the patient and the medical profession or operate compulsory health insurance plans established by political means; to further this function, the state should cooperate with medical and allied professional groups to provide the availability of medical and associated care through acceptable prepayment plans in areas where a shortage of medical and hospital facilities exists.

"4. It is in the public interest that the human factor in medical care be thoroughly recognized; the sanctity of the patient-physician relationship must be maintained and the method of providing medical care must not become enmeshed in bureaucratic red tape and a system of tickets, coupons, questionnaires and other political controls and delays.

"5. It is essential for the public welfare that there exist in each state a complete inventory of all medical resources and facilities. It is in the public interest that a coherent and comprehensive educational program be undertaken, preferably by responsible authorities and the medical profession in a coordinated effort, to advise all the people of the state on the facilities and services available to them in the event of need and to encourage sound public health measures for the prevention of both accidental and non-accidental illnesses and injuries.

"6. There should be a coordinated program on the part of all groups concerned with this problem, directed to the extension of voluntary health insurance plans, so that our people may systemically provide for their health care on a budget basis."

9. *Blood Banks.*

During 1947 the Council adopted two resolutions covering the operations of blood banks and pointing out that the function of the American National Red Cross should be one of maintaining a donor and distribution service for the benefit of blood banks operated on a non-profit community basis, with blood and blood derivatives to be delivered at cost price. A resolution embodying these principles was in-

troduced into the January, 1948, meeting of the A.M.A. House of Delegates and resulted in the adoption by that body of more stringent requirements of the American National Red Cross in order to retain the approval in principle granted the Red Cross national blood bank program by the June, 1947, A.M.A. House of Delegates. The A.M.A. resolution now calls for competent medical supervision of all scientific aspects of blood procurement and processing and the establishment of an A.M.A. advisory committee to the Red Cross.

10. *Student Health Service.*

The Council has further considered during 1947 the provisions made by Stanford University to furnish medical care services to its students. The University has cooperated fully in meeting requirements requested by the Council, particularly as to providing free choice of physicians by the students, and no further discussion on this subject is now before the Council.

11. *Rebates of Fees and/or Charges.*

During the closing months of 1947 the Council devoted considerable time to the matter of rebates received by physicians from laboratories, pharmacists, supply houses, and other firms or individuals. This discussion included consideration of plans already announced by some civic organizations to discredit the entire medical profession by publicity releases which might well have an adverse effect on the public relations of the medical profession. The Council on December 21, 1947, adopted a statement reiterating the Association's conviction that a physician must receive fees only for the rendition of professional medical services and not from any other source and requesting the component county medical societies to take all steps necessary to abate any such practices where they were found to exist. This statement pointed out that this position was in keeping with established Association policies and also stated that such practices were being indulged in by only a small percentage of the membership, which percentage, however, cast a reflection on the entire profession. In a further statement along the same lines, the Executive Committee on January 13 and January 18, 1948, issued an additional reiteration of this policy, called upon the county societies to assure the discontinuance of all rebate practices and called upon civic groups to require as a condition of membership a statement from prospective members that they would not indulge in the granting of paying of rebates. These statements are in line with nationally-known policies of the A.M.A., which were mentioned in various California appearances by the editor of the Journal of the A.M.A. in January, and it is sincerely hoped that such practices will be completely stamped out in California. The Council requests that the House of Delegates reaffirm these actions by the Council and call upon the component county medical societies to take any steps necessary, including disciplinary action against members, to make this procedure completely successful.

12. *Revision of State of California Constitution.*

The Association was honored in 1947 by the appointment of Dr. John W. Cline and Mr. Ben H. Read as members of advisory committees to a joint Interim Legislative Committee to Study Revision of the Constitution of the State of California. The Council believes that these two representatives will be able to assure the proper consideration of the medical profession in any rewriting of the state constitution.

13. *California State Chamber of Commerce.*

The Association was also honored in the appointment of Messrs. Howard Hassard, Ben H. Read and John Hunton to a special committee on hospitalization appointed by the Social Security Department of the California State Chamber of Commerce. It is expected that the decisions of this committee will be in line with publicly-known Association policies in regard to free enterprise and local autonomy in the matter of hospital construction.

14. *California Medicine.*

The Council wishes to congratulate Dr. Dwight L. Wilbur on the marked progress shown by the official journal, CALIFORNIA MEDICINE, during the past two years. The journal now occupies a position of extreme respect in all parts of the country and is becoming of increasing importance and interest to the members of the Association for whom it is primarily published. In appearance, editorial content, scientific material and all other departments, the journal has advanced tremendously in this period. In the business end of the journal, the Council has approved the withdrawal of the journal from the Cooperative Medical Advertising Bureau maintained by the A.M.A. and has appointed an advertising committee to supervise the acceptance of advertisements. This arrangement is expected to work out advantageously to the journal.

15. *California Tuberculosis and Health Association.*

The Council has appointed a liaison committee to work with the California Tuberculosis and Health Association in order to compose differences in programs between the two organizations. It is hoped that this committee will be able to assist in the formulation of a program acceptable to both organizations.

16. *Committee on History.*

The Council has approved the expenditure of necessary sums to assist the Honorary Historian, Dr. George H. Kress, to compile material for the proposed publication of the "History of the California Medical Association." The Honorary Historian is engaged in collecting material for this publication.

17. *Annual Session.*

The 1948 Annual Session has been arranged by the Committee on Scientific Work and has been approved by the Council. This year sees a departure from earlier precedent in that there are to be five guest speakers on the scientific programs and an additional guest speaker, Dr. George F. Lull, secretary and general manager of the American Medical Association, as a guest of the Association. The five guest speakers on scientific topics will be invited by the President of the Association, by the Sections on General Medicine and General Surgery, and (for the 1948 meeting) by the Sections on Anesthesiology and Dermatology and Syphilology. In future years the first three-named guest speakers will be continued and the other scientific sections, in alphabetical order, will be permitted two guest speakers at each annual session. The Council believes that this program will add interest to the annual sessions and will bring a wider range of speakers before the members of the Association.

18. *C.P.S. Fee Schedule Committee.*

The Council wishes to thank Dr. William L. Bender and his associates for the splendid work they did as members of the C.P.S. Fee Schedule Committee. The recommendations of the committee have been turned over to the Trustees of C.P.S., who have considered them and already acted on some. This committee has been continued and the Council believes its activities will benefit the entire profession in California. The commitee is privileged to report to the 1948 House of Delegates if it so desires.

19. *Revision of Constitution and By-Laws.*

In accordance with instructions given by the 1947 House of Delegates, the Council appointed a committee to consider revision of the Association's Constitution and By-Laws. This committee is now meeting and expects to have a report ready for presentation to the 1948 House of Delegates.

20. *Committee on Councilor District Redistricting.*

In accordance with instructions given by the 1947 House of Delegates, the Council appointed a committee to review the present Councilor Districts with a view toward possible redistricting. This committee is currently functioning and expects to have a report ready for presentation to the 1948 House of Delegates.

21. *Cancer Commission.*

The Council wishes also to express its appreciation to Dr. Lyell C. Kinney and the members of the Cancer Commission for their continued efforts to bring about an orderly and effective campaign to detect and treat cancer. The Cancer Commission has been extremely active throughout the year, has inaugurated a series of cancer studies in CALIFORNIA MEDICINE which may later be reprinted in pamphlet form, and has arranged for the production of an up-to-date cancer film for medical educational purposes. The commission has cooperated with the American Cancer Society and the State Department of Public Health in promoting a sound, constructive program.

22. *State Department of Public Health.*

The Council has been pleased to have Dr. Wilton L. Halverson, State Director of Public Health, as its guest at meetings of both the Council and the Executive Committee throughout the year. Dr. Halverson has been most cooperative in matters of legislation, policy and program and his presence at meetings has done much to dispel doubts which had previously arisen regarding his department's programs.

The Council wishes to express its appreciation and thanks for the services rendered by committee members, appointed officers and office staff members throughout the year. Our Association is a large one which cannot depend on single individuals but must rely on the sincere efforts of a large number of members and it is a source of both gratification and pride that so many members will serve diligently in carrying out the programs and policies of the Association. Among these members, some of the most prominent are the officers of the component county societies, who serve without compensation and with great patience and diligence in interpreting California Medical Association policies to their own county society members. The entire Association owes them a debt of gratitude.

Particular thanks are due Dr. L. Henry Garland, who for the past two years has served without compensation as Secretary-Treasurer of the Association. His duties are continuous and arduous and always carried out promptly, effectively and with benefit to all Association members.

Respectfully submitted,
EDWIN L. BRUCK, *Chairman of the Council*

REPORT OF THE PRESIDENT OF THE TRUSTEES OF THE C.M.A.

To the President and the House of Delegates:

The Trustees of the California Medical Association have met during 1947 and transacted routine business only. The corporation is a holding company only, having as its assets the reserve funds transferred to the corporation from time to time by the Council of the Association. Membership on the Council and membership in the Trustees of the C.M.A. are identical.

The financial position of the Trustees of the California Medical Association is shown in the audited reports presented by the Treasurer of the Association as his report.

Respectfully submitted,
JOHN W. CLINE, *President*

REPORT OF THE SECRETARY

To the President and the House of Delegates:

Your Secretary has attended the meetings of the Council and all but one of those of the Executive Committee during the past year, in addition to other meetings such as those of the Legislative Committee, and Committee on Rural Health, the Cancer Commission and similar bodies appointed by the House. In accordance with the By-Laws he has also served as the Chairman of the Committee on Scientific Work and as a member of the Committee on Postgraduate Activities. The Committee on Scientific Works continues to be a major obligation. Its report will be found elsewhere in this issue. The postgraduate program of the Association is being reactivated on what we hope will be a worthwhile scale this year. Your Secretary worked with the committee and regards the Association as fortunate in securing the services of Dr. Carroll B. Andrews as director for the program. Dr. Andrews served as Chairman of the Committee on Rural Medical Service in 1947 and arranged an excellent program for the State Rural Health Conference held at Sacramento on December 6, 1947. Members are urged to read the roster of speakers presented at this important conference.

The minutes of the Council Meetings should be read by all informed physicians, inasmuch as they contain data on the work performed by your officers and committees throughout the year. Attention is also drawn to the reports of other State Associations in the field of improved medical service and public relations, notably to the Report of Public Relations of the Colorado State Medical Association issued in July, 1947. Two medical News Letters of informative value are now available to physicians, one published by Mrs. Shearon of Washington, D. C., and the other by Dr. W. Black of the A.A.P.S., Chicago, Illinois. Members could well subscribe to these letters, and inform their associates and lay friends concerning their contents.

Your Secretary wishes to thank the officers of the Association and the staff of the Association's office for their unfailing cooperation and assistance, especially Mr. Hunton, Miss Griffin and her successor, Mrs. Rooney.

Respectfully submitted,
L. HENRY GARLAND, *Secretary*

REPORT OF THE TREASURER

To the President and the House of Delegates:

The duties of the Treasurer are handled by the Association's office staff and the books of the Association are audited each year by independent certified public accountants. Accordingly, the Treasurer's report is presented in the form of the audit performed by Hood & Strong, Certified Public Accountants, covering the period July 1, 1946, to June 30, 1947.

The audit report shows all income and expenditures for the above period, for both the California Medical Association and the Trustees of the California Medical Association, a non-profit corporation established some years ago as an organization to hold assets of the Association accumulated in the nature of a surplus. The report also shows a combined balance sheet of the Association and the Trustees as of June 30, 1947. Inasmuch as the combined showing of both organizations is essential to a complete understanding the Association's financial position, members are urged to study this balance sheet and the comparative figures for June 30, 1946, which are shown on it.

Respectfully submitted,
L. HENRY GARLAND, *Treasurer*

CALIFORNIA MEDICAL ASSOCIATION
STATEMENT OF INCOME AND EXPENDITURE
July 1, 1946, to June 30, 1947

INCOME

Dues and General:		
Membership Dues—less portion allocated to "Journal" subscriptions		$798,225.50
Exhibitors at annual meeting		11,845.00
Interest earned		3,674.71
		$813,745.21
Official Journal—"California Medicine":		
Advertising	$ 71,923.54	
Members' subscriptions—allocated from dues	24,687.00	
Cash subscriptions	1,598.80	
	$ 98,209.34	
Total Income		$911,954.55

EXPENDITURES

Administrative	$106,880.19
Scientific, educational, and public relations	288,795.44
Official Journal—"California Medicine"	83,047.97
Total Expenditures	$478,723.60
Excess of Income over Expenditures	$433,230.95

TRUSTEES OF CALIFORNIA MEDICAL ASSOCIATION (A CORPORATION)
STATEMENT OF INCOME AND EXPENDITURES
July 1, 1946, to June 30, 1947

INCOME

Interest on bonds	$3,110.23
Interest on savings accounts	70.53
Miscellaneous	1.00
Total Income	$3,181.76

EXPENDITURE

Audit fee	$ 130.00
Miscellaneous	40.00
Total Expenditure	$ 170.00
Excess of Income over Expenditure	$3,011.76

CALIFORNIA MEDICAL ASSOCIATION
STATEMENT OF EXPENDITURES
July 1, 1946, to June 30, 1947

Administrative:		
Salary—Executive Secretary		$ 12,333.32
Salaries—other		13,309.71
Traveling expense:		
Secretary	$ 396.81	
Officers	55.06	
Council	3,864.46	
Executive Committee	415.59	
Delegates to A.M.A.	13,666.15	
		18,398.07
Taxes—Social Security		606.02
Annual meeting expense		13,567.12
Legal expense:		
Retainer fee	$ 6,000.00	
Other legal expense	5,204.38	
		11,204.38
Pensions		4,740.00
Office equipment purchased		3,055.14
Rent		6,188.85
Office supplies and expense		3,619.22
Postage		482.33
Telephone and telegraph		1,163.02
Council and Executive Committee expense		2,000.69
Contribution to the United Public Health League		15,169.11
Miscellaneous		1,043.21
Total Administrative		$106,880.19
Scientific, Educational, and Public Relations:		
Public Policy and Legislation expense		$ 46,971.24
Department of Public Relations		178,863.12
Department of Public Relations—C.P.S. Promotion		44,342.36
Physicians Benevolence		8,120.00
Cancer Commission		2,681.27
Other committee activities		3,757.45
Subscriptions to Medical Libraries		4,060.00
		$288,795.44
Official Journal—"California Medicine":		
Salaries		$ 8,912.50
Printing		62,554.50
Advertising commission		4,952.74
Postage, wrapping, and mailing		3,537.02
Illustrations		1,165.94
Supplies and office expense		1,314.08
Discounts and collection expense		264.15
Reprints		347.04
		$ 83,047.97
Total Expenditure		$478,723.60

CALIFORNIA MEDICAL ASSOCIATION AND TRUSTEES OF CALIFORNIA MEDICAL ASSOCIATION (A CORPORATION)
San Francisco, California

COMBINED COMPARATIVE BALANCE SHEET

ASSETS	CALIFORNIA MEDICAL ASSOCIATION	TRUSTEES OF CALIFORNIA MEDICAL ASSOCIATION	COMBINED JUNE 30, 1947	COMBINED JUNE 30, 1946	INCREASE (DECREASE)
Cash	$242,688.13	$ 10,402.32	$ 253,090.45	$395,494.37	$(142,403.92)
Marketable securities		700,000.00	700,000.00*	146,878.52	553,121.48
Accounts receivable	13,752.25		13,752.25	6,114.67	7,637.58
Loan receivable	10,500.00		10,500.00		10,500.00
Endowment fund		264.98	264.98	262.03	2.95
Benevolence fund	8,566.80	13,527.25	22,094.05	14,788.55	7,305.50
Trust fund	3,859.84		3,859.84	3,130.15	729.69
Furniture, equipment, etc.	1.00		1.00	1.00	
Deferred charges	850.49		850.49	758.64	91.85
Deposit—United Air Lines	425.00		425.00	425.00	
	$280,643.51	$724,194.55	$1,004,838.06	$567,852.93	$436,985.13
LIABILITIES					
Reserves and Surplus:					
Accounts payable	$ 23,008.56		$ 23,008.56	$ 14,535.59	$ 8,472.97
Members' contributions to Endowment fund		$ 264.98	264.98	262.03	2.95
Benevolence fund	8,566.80	13,527.25	22,094.05	14,788.55	7,305.50
Trust account	3,859.84		3,859.84	3,130.15	729.69
Reserve for loan receivable	10,500.00		10,500.00		10,500.00
Surplus	234,708.31	710,402.32	945,110.63	535,136.61	409,974.02
	$280,643.51	$724,194.55	$1,004,838.06	$567,852.93	$436,985.13

* These consist of United States Government Bonds, a summary of which is as follows:

	PAR VALUE	INTEREST RATE	DUE DATE
U. S. Treasury Bonds	$ 5,000.00	3⅛	1949-52
U. S. Treasury Bonds	10,000.00	2¾	March 15, 1948
U. S. Treasury Bonds	10,000.00	2½	1949-53
U. S. Treasury Bonds	15,000.00	2½	1964-69
U. S. Treasury Bonds	20,000.00	2½	1965-70
U. S. Treasury Bonds	39,000.00	2½	1966-71
U. S. Treasury Bonds	581,000.00	2½	1967-72
War Savings Bonds	20,000.00	2½	1956—12 Years
	$700,000.00		

REPORT OF THE EXECUTIVE SECRETARY

To the President and the House of Delegates:

The Executive Secretary, as in former years, presents his report in the form of paragraphs devoted to his several duties, for the convenience of the House of Delegates and the reference committee which will consider the report.

1. *General.* The office has remained in the same location during 1947 and in the same space reported a year ago. The office staff has been increased by two new employees since last year, a new clerk and an advertising manager of the official journal. There are now three men and five women employees in the office, in addition to the Executive Secretary. Space is also provided for the director of postgraduate activities while he is in the office and facilities are provided for officers and committees.

Office equipment is in excellent condition and new items have been added as they are demanded by a growing membership. In this connection, the Executive Secretary recalls that a little more than seven years ago, when he started his employment with the C.M.A., the membership was just about two-thirds what it is today. The increase of 50 per cent in membership during this period has brought about new problems and has required the establishment of new systems and employment of additional equipment. At present the office is equipped to give every service to the members, officers, committee members and others who have need to call for assistance.

2. *Meetings.* The Executive Secretary has attended all meetings of the Council and Executive Committee, has attended meetings of the C.P.S. Board of Trustees as liaison for the Association, has presided over the meetings of the Advisory Planning Committee, has attended the two meetings of the A.M.A. House of Delegates, and participated in the A.M.A. Secretarial Conference. In addition, he has served as executive secretary of the United Public Health League and has more recently been honored by election as secretary-treasurer of the Conference of Presidents and Other Officers of State Medical Associations. Some of these meetings overlap or occur at connected dates, which makes it possible to cover the ground without taking too much time away from the Association office.

The Executive Secretary has also visited various California counties in response to invitations from officers and county medical societies.

3. *Financial.* The Association's finances were in excellent condition at the close of 1947 and continue so in the early months of 1948. At the end of the last calendar year there was $700,000 in reserve in U. S. Government bonds held by the non-profit corporation, Trustees of the California Medical Association. There was another $100,000 in cash in current accounts, available for further investment in the judgment of the Council.

The auditor's report for the fiscal year ended June 30, 1947, is printed under the Treasurer's report and is self-explanatory. Taking these figures for the first half of 1947 and the Association's own (unaudited) book figures for the second half of the year, several comparisons are possible.

For the calendar year 1947 the Association showed total revenues of $923,818, compared with $652,791 in 1946. The increase is attributable to an increase in dues received from all members, including many who had been in military service and enjoying a waiver of dues a year earlier. Additional increases in revenues resulted from higher advertising sales for the official journal and from miscellaneous sources, principally space sales at the annual session.

Expenditures for the year were $462,783, leaving a surplus of $461,035 for the year. The bulk of this amount was invested in U. S. Government bonds, which were then transferred to the Trustees of the California Medical Association. The bond account increased from $294,000 to $700,000 during 1947.

The Association's journal, CALIFORNIA MEDICINE, suffered a loss in 1947, with revenues of $72,347 and expenses of $91,426. On a comparative basis, 1946 revenues were $69,755 and expenses were $57,349. Percentagewise, 1947 revenues were 3.7 per cent higher than 1946 and expenses were 59.4 per cent higher. Printing costs alone increased 55.3 per cent, from $42,291 to $65,698, reflecting higher paper and labor costs as well as increased circulation and higher costs of everything which goes into making the journal.

In response to various inquiries, the Executive Secretary wishes to set forth in this report the manner in which the Association's books are kept insofar as the journal is concerned. Revenues shown for the journal are cash revenues derived from advertising, subscriptions and reprint sales. Expenses shown are those directly chargeable to the journal, including printing and mailing costs, illustrations, advertising sales expense, postage, office supplies and the salaries of the Editor and his assistant. No clerical salaries are charged against the journal, nor is any general office overhead or rent so charged. Similarly, no subscription revenues from C.M.A. members are shown as credits to the journal. The figures shown in the preceding paragraph indicate a sizable out-of-pocket loss on the journal for last year; on the other hand, on a strict cost accounting basis, if C.M.A. members' subscriptions were shown as credits and all direct and indirect office expenses were shown as journal expenses, the magazine would be on about an even financial keel for 1947. In the long run there is no difference to the Association—money may come from one pocket to go into another—but these facts are stated for the benefit of those interested. The Association is striving to present to its membership a well edited, well prepared and printed magazine, with the best possible scientific and organizational material, displayed in a readable style. From numerous comments received by Association officers, it seems obvious that these aims are being attained.

4. *California Medicine.* Several comments concerning CALIFORNIA MEDICINE appear in the preceding section of this report. In addition, it should be reported here that the size of the finished magazine was increased during 1947 from 7¾ by 10¾ inches to 8 by 11 inches. This makes the journal the same size as many other state journals and provides wider margins on the text and advertising pages. There are some advantages to the larger size in the advertising pages but the principal advantage is in greater clarity and easier readability in the text pages. The larger page size has meant a larger paper sheet for printing, with an increase in cost because of the added tonnage. In the addition to this increase, there have been increases in printing and distribution costs, and the allowance for illustrations has been adjusted upward in order to permit better illustrations for scientific articles.

In the latter part of 1947, CALIFORNIA MEDICINE withdrew its membership in the Cooperative Medical Advertising Bureau, a department of the A.M.A. which furnishes advertising representation to various state medical journals. Instead, a new advertising manager, Mr. Herbert A. Dady, was employed to give full time to the sales of the journal. Mr. Dady is an experienced advertising man and has already brought in various new accounts which heretofore have not been among the journal's advertisers. He makes his headquarters in the Association office and covers the entire country by correspondence and telephone, augmented by two eastern trips annually and local visits in California.

The employment of an advertising manager, together with an increase in advertising rates, effective late in 1947, is expected to improve the financial position of the journal and to provide a closer supervision of its business. Advertising standards have been maintained on a high level, with a committee of Association members serving as censors for advertising of products and services not already bearing an A.M.A. seal of acceptance.

At the A.M.A. secretarial conference late in 1947, CALIFORNIA MEDICINE was selected as one of the four state journals to be analyzed in a "clinic" session of publishing experts. While there was adverse as well as complimentary criticism of the journal, it is safe to say that the overall impression gained by these experts was mainly commendatory. Credit for this goes to the editor and his assistant, Mr. Robert F. Edwards; the Executive Secretary exercises little beyond supervisory services to the journal, plus assistance when requested in the preparation of both advertising and text material.

5. *Public Policy and Legislation.* Last year was a legislative year and the Executive Secretary was called upon to assist in this important work. His functions were principally in San Francisco, with a few visits to Sacramento. In the main, he acted to carry out the wishes of the committee and to cooperate with legal counsel, legislative representative and public relations counsel in working for the Association's legislative program.

Along similar lines, the Executive Secretary has continued to serve as Executive Secretary of The United Public Health League, which operates as a federation of western state medical associations which maintains an office in Washington, D. C. This work entails the preparation and distribution of a letter report from time to time and general administrative duties which fit in nicely with the Association's work and do not impinge on Association time.

In June, 1947, the Executive Secretary was elected Secretary-Treasurer of the Conference of Presidents and Other Officers of State Medical Associations, a national group which holds annual meetings and serves to prepare various proposals for the consideration of the A.M.A. House of Delegates. This function is destined to be a temporary one, inasmuch as the office involved is by custom rotated about every two years, and the work was undertaken with the knowledge and consent of the officers of the Association.

6. *Public Relations.* The Executive Secretary has cooperated during the year with the public relations counsel in the planning of public relations activities, checking of budgets, assisting in preparing news releases and in various other ways. Public relations counsel has taken over the complete public relations program of the Association, under direction of the Council, so that the office work in this respect is minimized.

7. *Advisory Planning Committee.* The Executive Secretary has served as chairman of this committee throughout the year and the recommendations and discussions of the committee have been published as a part of the Council minutes. This committee acts under the direction of the Council and has authority only to present recommendations to the Council, which may act in its discretion on such proposals. The committee has been asked in the past year to work with the standing Committee on Medical Economics in surveying individual physician-patient relationships and is prepared to work similarly with other committees. The Advisory Planning Committee now includes the Executive Secretary, the Legal Counsel, the Executive Secretary of the Public Health League of California and the Executive Secretaries of county medical societies in Los Angeles, San Francisco, Alameda, Santa Clara, San Diego and Kern counties.

8. *Annual Session.* The 1948 Annual Session has been arranged for San Francisco, where the facilities are adequate to handle a large meeting, albeit in several neighboring hotels and theaters. There will again be technical exhibits, for which the exhibitors pay rentals which in great measure defray the cost of the session. Members are urged to visit these exhibits and show their appreciation to the exhibitors and their representatives.

9. *Conclusion.* The Executive Secretary wishes to take this opportunity to express his personal thanks and appreciation to the officers, councilors and committee members of the Association, the officers of the county medical societies and, by no means last, the entire office staff. The manifold duties in the Association office call for a high degree of teamwork for successful operations and the staff members seem always to deliver the necessary effort at the proper time. To them must go the credit for whatever the office has been able to accomplish for the benefit of the entire membership.

Respectfully submitted,

JOHN HUNTON, *Executive Secretary*

REPORT OF THE EDITOR

To the President and the House of Delegates:

During the past year every attempt has been made to keep CALIFORNIA MEDICINE at a high standard as the official journal of the C.M.A. The number of scientific and original papers which has been published has increased considerably. A number of excellent symposia presented at the annual meeting of the Association in 1947 have appeared in print and have added considerably to the good material published in the journal. Through the persistent efforts of Robert Edwards, Assistant to the Editor, almost all the papers presented at the annual meeting in 1947 were submitted to CALIFORNIA MEDICINE for publication. In addition to this source of material a large number of manuscripts has been submitted directly to the editorial office. Unfortunately it has not been possible to publish all of them owing to the highly technical aspects of some of them with consequent limited audience interest, and to the limitation of space.

Since July, 1947, beginning Volume 67, the journal has been published in San Francisco, which has simplified many problems and permitted delivery of the journal during the month in which it is due.

With the development of the Public Relations News published by direction of the Council of the C.M.A. and of the C.P.S. Progress, both of which cover much of the activity of organized medicine in the C.M.A. and in C.P.S., the need for extension of those portions of CALIFORNIA MEDICINE having to do with organized medicine and socio-economic problems has been less.

Clinical Conferences, articles on Medical Progress and Clinical Pathological Conferences have been a distinct addition to CALIFORNIA MEDICINE. Thanks are due to Dr. Edgar Wayburn for his great help in obtaining material for the section on Clinical Conferences.

In the past year a series of articles on Cancer obtained through the Editorial Committee of the Cancer Commission has been published. It is planned to have these appear eventually in a cancer manual.

It is hoped that members of the C.M.A. will more frequently than in the past use the sections of Letters to the Editor, News and Notes and Anti-Spasmodics to bring lively subjects to the attention of readers of the journal.

Finally, great thanks are due to the members of the Editorial Board, to the Executive Committee of the Board and to many physicians who have written Book Reviews, for the valued assistance in making the editor's task more simple and the caliber of CALIFORNIA MEDICINE representative of a great state medical association.

Respectfully submitted,

DWIGHT L. WILBUR,
Editor, CALIFORNIA MEDICINE.

REPORT OF LEGAL DEPARTMENT

To the President and the House of Delegates:

The Legal Department submits the following report covering the period from the last session of the House of Delegates to the end of January, 1948, the time of the preparation of this report.

During the year our work has, as in past years, involved preparation and rendering of opinions to the Association, to various county medical societies, and to committees and members of the Association on various matters.

We have attended all meetings of the Council, Executive Committee, Committee on Public Policy and Legislation, Advisory Planning Committee, and in addition have attended meetings of other standing and special committees.

With the extension of the activities of the Association in recent years, the work of this department has of necessity increased, and the variety of legal problems affecting the Association has likewise grown.

There are a number of matters of great interest to the welfare of the profession that have taken a great deal of our time during recent months, but which should not appear in a published report as, in each instance, they involve the professional relationship of attorney and client. It is our request that we be permitted to supplement this report orally at the next session of the House of Delegates, at which time a complete review of current legal matters affecting the Association will be presented.

In closing, we wish to express our constant desire to serve the medical profession to the best of our ability.

Respectfully submitted,

PEART, BARATY & HASSARD,
General Counsel.

REPORTS OF DISTRICT COUNCILORS

FIRST COUNCILOR DISTRICT

Imperial, Orange, Riverside, San Bernardino and San Diego Counties

To the President and the House of Delegates:

Since being elected to the Councilorship of the First District last May, I have attended all of the meetings of the Council.

In addition to carrying out the instructions of the House of Delegates, and the rather complex business of the California Medical Association, a definite plan is now in the process of being carried out to correct evils of rebates to physicians from laboratories, optical companies, supply houses, and others serving the medical practice.

The tremendous influx of new physicians continues in each of the counties of the district. The recent attack on the physicians in Orange County for failure to answer emergency calls unfortunately received national publicity in the press and on the radio. When investigated, the allegations that 24 doctors had been called and 24 refused to see a man at the time of his death, and that he was finally pronounced dead by a mortician, were found to be absolutely untrue. There is, and has been at all times, adequate coverage for emergency calls. It is regrettable that the truth of the situation did not receive the same publicity that did the unjust charges.

The more serious problems remain the lack of sufficient hospital space and facilities, and graduate nurses. Our supply of physicians is now adequate.

Attendance at meetings and increase in interest of our ever-increasing problems are especially gratifying.

Respectfully submitted,

JOHN D. BALL, *Councilor,*
First District

SECOND COUNCILOR DISTRICT

Los Angeles County

To the President and the House of Delegates:

Your Councilor for the Second District has attended all of the California Medical Association Council meetings for the past year, the minutes of which have been published in CALIFORNIA MEDICINE at regular intervals for your study.

Inasmuch as the Council members receive their instructions from the House of Delegates and their constituents in each Councilor District, it is imperative that all members of the California Medical Association make a special effort to attend each annual session of the House of Delegates. Many men attend the scientific sessions and pass over the interesting work which is done each year by the House of Delegates. It is preferable to get first-hand information at the time the House of Delegates is in session, rather than to depend upon someone to write a full account of the proceedings, so again I am urging each California Medical Association member to attend not only the scientific sessions, but the meeting of the House of Delegates, at which they will be very, very welcome.

Again this year the Councilor for the Second District (Los Angeles) has endeavored to carry out the instructions and the wishes of the House of Delegates and of his constituents in Los Angeles County.

Respectfully submitted,

JAY J. CRANE, *Councilor,*
Second District.

THIRD COUNCILOR DISTRICT

Kern, San Luis Obispo, Santa Barbara, Ventura and Inyo-Mono Counties

To the President and the House of Delegates:

The component societies of the Third Councilor District are all in good condition with active memberships and regular meetings.

One component society has acquired an executive secretary since the last report, and a very good program is being developed.

There are a few areas in the District where additional personnel could be used.

Respectfully submitted,

H. E. HENDERSON, *Councilor,*
Third District

FOURTH COUNCILOR DISTRICT

Fresno, Madera, Kings, Tulare, Merced, Mariposa, Calaveras, San Joaquin, Tuolumne, and Stanislaus Counties

Earnest efforts on the part of the Councilor have been made to inform the membership of the urgent importance of promoting improved public relations. Honest, efficient medical service to the patient, a sympathetic personal interest in the problems of the patient, and never fees for services in excess of ability to pay, have been stressed as the best ground work for a better attitude of the public toward the profession.

One County Society in the district is now considering the employment of an Executive Secretary who will give an impetus to friendly relations between individual physicians and patients.

No disturbing organization problems have required attention.

The duties of the Councilor have been given due consideration and attention.

Respectfully submitted,

A. E. ANDERSON, *Councilor,*
Fourth District

FIFTH COUNCILOR DISTRICT

Monterey, San Benito, San Mateo, Santa Cruz and Santa Clara Counties

To the President and the House of Delegates:

The county medical societies in the Fifth Councilor District have been most active this last year in an attempt to increase the number of hospital beds in their respective areas. In Santa Clara County, the San Jose Community

Hospital and the O'Connor Hospital, both located in San Jose, have put on extensive drives and it seems likely that 400 new beds will be available in this community within a short period of time. San Mateo County has voted in two hospital districts, the Sequoia Hospital Group and the Peninsula Hospital District, and several hundred beds are in the offing in San Mateo County. At Watsonville in Santa Cruz County, a new wing was added to their hospital. More beds were made available in Santa Cruz and there are prospects for additional ones.

Numerous constructive meetings with C.P.S. representatives have been held throughout the District.

In Santa Clara County plans for a community blood bank have been completed in which the county medical society in conjunction with the Red Cross, has set up a splendid program.

This is my last term as Councilor of this District. In retiring I wish to thank the county societies in the district for their cooperation and I want them to know I have appreciated their help and it has been a pleasure to serve them during my term of office. I hope my successor will enjoy meeting and working with the men in the District as I have, and will receive the same splendid assistance that has been given to me, so that the understanding and friendship between these component societies may be further strengthened to the end that the medical profession generally may be benefited.

Respectfully submitted,

R. S. KNEESHAW, *Councilor,*
Fifth District.

SIXTH COUNCILOR DISTRICT

San Francisco County

To the President and the House of Delegates:

During the past year, acting as Councilor of the Sixth District in San Francisco, I have attended all of the meetings of the Council of the California Medical Association save one day of the Council meeting in December when I was ill.

During the past year much of importance has happened in San Francisco County.

Probably not the least important is the fact that the San Francisco County Society has finally broken with the Health Service System of San Francisco, which system is a compulsory health insurance system in which all of the employees of the City and County of San Francisco are compelled to participate.

The situation became so intolerable that action finally had to be taken and at the date of the writing of this note, no settlement has been reached.

The San Francisco County Medical Society has grown and at the present time the membership stands at 1,375.

During the past year the San Francisco County Medical Society has embarked on a program of personal relations with the patients of the members of the County Society in that the Economic Bureau attempts to make adjustments in fees, try to collect delinquent accounts and do many other things in an attempt to promulgate better relations between patient and doctor.

Members of the San Francisco County Medical Society were called upon on more than one occasion during the year of 1947 to appear in Sacramento to fight compulsory health insurance in the Legislature.

Many preparations are being made for the centennial years of 1948, 1949 and 1950 by the San Francisco County Medical Society, to include the entertainment in San Francisco of the California Medical Association in 1948, the American College of Physicians in 1948, and the American Medical Association in 1949.

Respectfully submitted,

EDWIN L. BRUCK, *Councilor,*
Sixth District

SEVENTH COUNCILOR DISTRICT

Alameda and Contra Costa Counties

To the President and the House of Delegates:

The past year has seen the over-all plans in relation to medical economics initiated by the Alameda County Medical Association in 1945 reach their completion. The composition of the complete program is made up of several groups, each of which is functioning at present.

1. Voluntary health insurance
2. Bureau of Medical Economics
3. Fee Complaint Committee
4. Ethics Committee

These departments, plus the facilities of the County and State, can give adequate medical care to everyone. Adjustment of medical cost ranging from indigent to full pay is provided for. Injustices perpetrated by a small minority of physicians also are brought under scrutiny.

Any problem, professional or economical, can be solved. The Alameda County Medical Association is well into actually carrying out the above plan. At this time monthly ads appearing in newspapers offer full guarantee of medical care for everyone.

The Contra Costa Medical Association is an integral part of the plan. The members utilize the Bureau of Medical Economics and participate in the malpractice and the health and accident insurance program. They also receive the A.C.M.A. bulletin.

The Malpractice Insurance Program which started early in 1946 has proved most successful. The premium rate has dropped more than 20 per cent below the original rate which at the onset was well below the prevailing commercial rate. To date, not one cent has been paid on any claim. The Malpractice Insurance Program has resulted in a saving of $40,000 in the past year to members of the Alameda County Medical Association.

The Blood Bank of the Alameda County Medical Association, which also serves Contra Costa County, deserves mention. It has never been necessary to refuse blood of any type or amount when requested. In no instance has an individual been required to pay if such payment would render a financial hardship to the patient.

Respectfully submitted,

DONALD D. LUM, *Councilor,*
Seventh District

EIGHTH COUNCILOR DISTRICT

Alpine, Amador, Butte, Colusa, Eldorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo and Yuba Counties

To the President and the House of Delegates:

Since the Legislature has been in session in Sacramento during the past year there has been an increase in the duties of the councilor for this district. Many of the legislators and their families require medical advice and treatment while away from home and the physicians in Sacramento attempt to furnish this assistance when requested by the local councilor. In addition, we cooperate actively with the legislative committee of the California Medical Association in supplying speakers at various Senate and Assembly hearings which deal with problems of importance to medicine.

During the latter part of this year I visited many of the county medical societies in this district and discussed with them various medical problems with special emphasis upon the public relations aspect of medical practice. There is a growing realization in this district of the importance of public relations to the future of medicine and a healthy respect for any suggestions which will increase the prestige of medical men in the public estimation.

Respectfully submitted,

FRANK A. MACDONALD, *Councilor,*
Eighth District

NINTH COUNCILOR DISTRICT

Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, Siskiyou, Solano, Sonoma, and Trinity Counties

To the President and the House of Delegates:

During the year 1947 your Councilor has visited the following counties: Marin, Napa, Solano, Sonoma, Humboldt and Siskiyou.

The latest visit was in November at Weed, California, where Dr. D. H. Murray and I spent three hours with seven members of the Siskiyou County Society discussing the whole A.M.A. and C.M.A. programs with the members present. Many questions were asked and answered concerning C.P.S. and the building of hospital beds. There is still a scarcity of doctors in this area, as well as hospital beds.

The Humboldt County meeting was a total loss because the speaker was delayed on the highway so many times and for as long as half an hour by road-blocks that he failed to arrive in Eureka until 9:45 p.m. In the meantime the members got tired and following a nice dinner went home.

A four county meeting on July 16, at the Meadow Country Club at Fairfax, California was well attended and was preceded by a golf tournament. At dinner, President John Cline, John Hunton, Hap Hasard, Ben Read and Dr. D. H. Murray were the principal speakers, aided and abetted by Clem Whitaker who explained our entire public relations program. Even Councilor Stanley Kneeshaw of San Jose and Councilor Gordon McLean of Oakland indulged in our successful evening. Counties represented were: Napa, Sonoma, Marin and Solano. Marin County Medical Society acted as host.

We still have a problem which was mentioned last year and year before. Namely, Dr. Sidney Garfield and Associates. We do not need these men in Solano County because we have had a large influx of doctors practicing private medicine. Vallejo General Hospital, which is strictly private, is extending its operative facilities, departments, and bed capacity so 100 beds will be available instead of 65, during the year 1948.

Sonoma County and Marin County are in the midst of a campaign for more beds and better hospital facilities.

On the whole, 1947, was quite a satisfying year to all.

Respectfully submitted,
JOHN W. GREEN, *Councilor, Ninth District*

REPORTS OF COUNCILORS-AT-LARGE

To the President and the House of Delegates:

As Councilor-at-Large I have attended all meetings of the Council of the California Medical Association. It has been a great pleasure to take an active part in the deliberations of this body.

I have also attended the Council meetings of the Alameda County Medical Association, in order to correlate the work of both State and County organizations.

It was my privilege to attend the Annual Meeting of the combined Medical Associations of Marin, Sonoma and Solano Counties.

Respectfully submitted,
H. GORDON MACLEAN, *Councilor-at-Large*

To the President and the House of Delegates:

This is my first year on the Council as I was appointed to serve during the unexpired term of Dr. Louis J. Regan.

The work of the Council continues to grow in scope and magnitude. The foremost problem in our minds today is the continued support of voluntary prepaid medical care. It is becoming more and more apparent that this can be accomplished only by the absolute uniting of the profession as a whole as factionalism has no place in the California Medical Association.

Respectfully submitted,
EUGENE F. HOFFMAN, *Councilor-at-Large*

To the President and the House of Delegates:

I have attended all of the meetings of the Council during the past year. Serious thought and judicious consideration has been given by the Council to all items of business. Full and free debate of all pertinent phases of the medical problems throughout the state have, I believe, resulted in proper decisions.

The medical profession must continue to assume a unified, militant stand in upholding freedom from overwhelming political and bureau controls. We must maintain and continue positive steps to assure that appropriate legislative measures be written, and equally important, is to prevent inappropriate legislation from being foisted upon the public.

It is the duty of the California Medical Association to take the lead in ridding the profession of unethical practices where such exist, of fee splitting, or giving or accepting rebates. Failure to do so can very properly cause the buying public to lose confidence.

California Physicians' Service, although not yet perfect in the eyes of all men, is exploring the way to provide prepaid medical service to a large segment of the population. Many honest and hardworking people are giving it much thought and planning. It appears to be on the road to self-sustenance. It deserves continued support.

Not one of us in the California Medical Association must overlook the concept that the best interests of the medical profession and of the public are one and the same statewide.

Respectfully submitted,
C. V. THOMPSON, *Councilor-at-Large*

To the President and the House of Delegates:

As one of your Councilors-at-Large and Chairman of the Executive Committee I have regularly attended the meetings of the Council during the past year. The more frequent meetings of the Council have been extremely useful in enabling this body to deal more effectively with the many problems which have arisen. Meetings lasting two days have been found to be necessary.

As many of you know, the Council has been under fire. From my personal experience, however, I am convinced that the welfare of the Council of the California Medical Association as a whole has been foremost in the minds of every councilor and that none has spared himself in order to further the legitimate ends of organized medicine.

Respectfully submitted,
SIDNEY J. SHIPMAN, *Councilor-at-Large*

To the President and the House of Delegates:

As one of your Councilors-at-Large, I have attended all regular and special meetings of the Council, and a number of the component County Societies.

I am interested in and have worked for the advancement of organized medicine in the state and endeavored to promote cooperation among its members.

Respectfully submitted,
WALTER S. CHERRY, *Councilor-at-Large*

To the President and the House of Delegates:

By far the most important problem during the year has been obtaining vigorous action to outlaw secret rebates and commissions. For more than ten years the Council of the Los Angeles County Medical Association has been confronted with the problem of rebating and has passed innumerable resolutions against all such practices in any guise or pretext whatsoever, all to little effect.

It is to the public interest that we should set up a workable code of ethics with provisions in it which will enable

us promptly to sever our connections with any members who do not live up to our code of ethics. As noted in the Rich report, the problem of the "erring brother" and the fact that he often gets away with it, is a sore point with other physicians and is a very serious matter from the standpoint of public relations. Unless we have a system of discipline which actually functions, the dishonorable acts of a few can discredit the many in the eyes of the public.

Respectfully submitted,

WILBUR BAILEY, *Councilor-at-Large*

REPORT OF THE EXECUTIVE COMMITTEE

To the President and the House of Delegates:

Your Executive Committee has held several meetings as occasion demanded to deal with urgent matters which could not wait for regularly scheduled meetings of the Council. The minutes of such meetings have been presented to the Council for approval and have been subsequently published. In general, it has been the aim of the Executive Committee to limit as far as possible the burden of work of the Council itself and to filter the essential from the non-essential matter which might otherwise occupy the Council's time.

The Executive Committee has attempted to be of service to C.P.S. It has been extremely interested in the reports which C.P.S. has presented and wishes to congratulate the officers of C.P.S. on their excellent program.

Respectfully submitted,

SIDNEY J. SHIPMAN, *Chairman*

AUDITING COMMITTEE

To the President and the House of Delegates:

The Auditing Committee has performed the functions laid down in the By-Laws. The professional audit of the Association's books showed them to be in order and the Committee has submitted its recommendations for the 1948 budget.

Respectfully submitted,

SIDNEY J. SHIPMAN, *Chairman*

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

To the President and the House of Delegates:

Until the last sound of the gavel of the 1947 Legislature the threat of Compulsory Health Insurance was constantly over us. It was indeed gratifying to be relieved of this threat by the adjournment of the Legislature.

Owing to deaths and resignations there existed three vacancies in the Senate and three in the Assembly. These vacancies were filled by men elected at elections specially named by the Governor. Your Legislative Committee was interested in these elections as some of the candidates were very progressive, forward-looking men who desired the best for public health. In at least five of the elections such type of men won. Your Legislative Committee is now considering various candidates for our State Legislature and National Congress.

Although the Legislature is to convene on the First Monday in March, supposedly for financial purposes it will be necessary to keep in touch with the legislators during this session.

Your Committee wishes to thank the officers and many, many members of the California Medical Association, and the Woman's Auxiliaries for their untiring efforts in assisting us at all times.

Respectfully submitted,

D. H. MURRAY, *Chairman*

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Executive Group

George M. Uhl, Chairman, 1949
C. M. Burchfiel, 1948 Orrin Cook, 1950

To the President and the House of Delegates:

The Committee on Health and Public Instruction has attempted to keep in touch with health activities concerning practicing physicians, public health officials, and the general public. While no formal meetings have been held during the past year, the Committee stands ready at all times to assist the Association in the field of health education.

Respectfully submitted,

GEORGE M. UHL, *Chairman*

COMMITTEE ON HISTORY AND OBITUARIES

Executive Group

Morton R. Gibbons, Sr., Chairman, 1947
Robert A. Peers, 1948 E. T. Remmen, 1949
George H. Kress, ex officio

To the President and the House of Delegates:

The Committee again urges the organized county units of the County Medical Association to gather medical historical material.

At this particular time in California's history such research should be easier than it will ever be again.

In some areas commendable work has been done. Attention is invited to the very praiseworthy "History of the Alameda County Medical Association" by Milton Henry Shutes—an amplification and extension of the work of Frank H. Makinson.

A similar interesting volume could be prepared of the medical history of many counties of the state and would preserve valuable material which otherwise will be lost.

Respectfully submitted,

MORTON R. GIBBONS, SR., *Chairman*

COMMITTEE ON HOSPITALS, DISPENSARIES, AND CLINICS

Executive Group

Carroll B. Andrews, M.D., Chairman, 1950
Clarence E. Reese, 1948 Anthony J. J. Rourke, 1949

To the President and the House of Delegates:

The application of the Hill-Burton Bill and its concomitant state legislation to California hospital organization and construction has continued to receive consideration. Upon the advice of the C.M.A. Council arrangements have been made for action by a joint Committee, composed of a representative from the Association of California Hospitals and the Chairman of the Committee on Hospitals, Dispensaries and Clinics, to study and make recommendations regarding the location, operation and staffing of such new hospitals as might be instituted under the Local Hospital District Law. A tentative list of recommendations is to be presented to the Council. Efforts have been made to keep in close touch with local and state hospital organizations and the Bureau of Survey of California Department of Public Health.

Respectfully submitted,

CARROLL B. ANDREWS, *Chairman*

COMMITTEE ON PUBLICATIONS

To the President and the House of Delegates:

The business and editorial departments have done their work so well there has been little for the Publications Committee to do in 1947.

Respectfully submitted,

GEORGE W. WALKER, *Chairman*

COMMITTEE ON INDUSTRIAL PRACTICE

To the President and the House of Delegates:

The Committee on Industrial Practice has had no formal meetings. During the year there has been considerable discussion of a revision of the Fee Schedule for the Industrial Accident Commission. On the date of writing this report, a considerable amount of data has been forwarded to this Committee for consideration.

There will be a recommendation made to the House of Delegates or to the Council before the annual meeting as to the results of this conference on Fee Schedules.

This will be presented to the Council and, if it is their desire, will be presented to the House of Delegates as an amendment to the report.

Respectfully submitted,

DONALD CASS, *Chairman*

COMMITTEE ON MEDICAL EDUCATION AND MEDICAL INSTITUTIONS

Executive Group

B. O. Raulston, Chairman, 1950

L. R. Chandler, 1948 Francis Scott Smyth, 1949

To the President and the House of Delegates:

The Medical Schools of California, and of the entire United States must meet again the task of selecting students for the freshman classes in 1948. A number of factors contribute to the increasing problems involved in this process. Statistics are not available but from all indications there are approximately four academically qualified applicants for each of the places in the freshman classes. This takes into consideration duplication of applications. The function of the committee on selections is to accept those students who give the greatest promise of completing the Course of Medical Education, and of making the best use of their training in the practice of Medicine, Research or Teaching. Scholastic ability, aptitude and personal fitness are the important factors to be considered.

Because of the recent war larger numbers of students who were preparing for medical school were taken into military service. Some of these were permitted to continue their original plans in schools to which they were assigned; many others were directed into other channels. Also many students who were taken into military service before they had definitely decided upon a career, because of their military experiences selected medicine as their desired profession. Following the war these groups of students have returned to college with renewed interest and increased determination. They have made conspicuously good academic records in college; they have provided a powerful influence for good morale; they deserve much praise and consideration. Their situation enters heavily into the selection of students for any professional school. The sacrifice that has been made by these students cannot fail to give them some degree of priority when selections are to be made for continued training.

No one can fail to recognize the importance of wise selection of medical students. Anyone who has served on a committee for selection of such students can write or expostulate at great length upon the process and its importance.

Plans for the development of a School of Medicine in the University of California at Los Angeles constitute the most important change in medical education in the state. According to certain announcements the school will be developed almost entirely on the campus at Westwood. Dr. Stafford Warren has been appointed dean and a few appointments to the clinical faculty have been made. With adequate financial support from the state this school should develop into one of great importance; the opportunity for rendering service to the community in which it is to be located, and to the entire country is indeed great.

Requests for refresher and review courses, and for postgraduate training in general continue to exceed the facilities available for such instruction. What the future of this type of training may be is necessarily a great question. While there is undoubtedly a close relationship between present demands and federal support, it may be that doctors, on their own, will support the right kind of graduate training indefinitely: it was true in Austria to the time of World War I!

In California there are three Veterans' hospitals operating in conjunction with committees from the five medical schools in the state. The plan is to raise the standard of patient care, instruction of house staff, and eventually research work, to the level found in university hospitals. Within the short time in which this program has been in operation great progress has been made. Of first importance has been the quality of care of patients; next the provision of training for larger numbers of Veteran doctors who otherwise could not have had such opportunities. Therefore, for patients, for house staff and for attending staff there has been an important step forward. It is our sincere hope that this progress may continue.

Respectfully submitted,

B. O. RAULSTON, *Chairman*

COMMITTEE ON MEDICAL ECONOMICS

Executive Group

H. Gordon MacLean, Chairman, 1948

Howard W. Bosworth, 1949 Dell T. Lundquist, 1950

To the President and the House of Delegates:

The 1947 House of Delegates and the Council of the California Medical Association instructed the Committee on Medical Economics to study the following problems:

1. Prepaid health insurance plans.

2. Medical Economic relations between patients and individual physicians of California.

3. The purposes, objects and methods of the Bureaus of Medical Economics as set up by County Medical Associations in the San Francisco Bay Area.

The Committee has had many meetings and has gone over a large amount of material, including the entire file of the Chandler Committee of 1946 on prepayment health insurance. It has corresponded and held discussions with executives of California Physicians' Service and leading prepayment plans throughout the United States, and will have a final meeting with experienced Medical Care and Blue Cross executives in March, 1948.

As a result of a meeting with the Advisory Planning Committee of the California Medical Association, there has been put into effect a study of Bureaus of Medical Economics. This work is being carried out by the Bureau of Medical Economics of the Alameda County Medical Association, and a complete analysis of this bureau is being made, under the direction of Mr. Rollen Waterson, Executive Secretary of the Alameda County Medical Association.

A study is being made of the methods and results of the Professional Conduct, and the Fee Complaint and the Malpractice Committees of the Los Angeles Medical Association. This work is being carried out by Dr. L. Regan of Los Angeles, and Mr. Stanley Cochems, Executive Secretary of the Los Angeles Medical Association.

Information is being obtained from representative groups of doctors concerning attitudes of the medical profession toward certain phases of prepayment health insurance and Bureaus of Medical Economics.

None of the above studies can be completed until just before the Annual Meeting in April. A complete report with recommendations will be presented to the House of Delegates and the Council of the California Medical Association at the 1948 Annual Session.

Respectfully submitted,

H. GORDON MACLEAN, *Chairman*

REPORT OF THE POSTGRADUATE COMMITTEE

To the President and the House of Delegates:

In conformance with the resolution and action of the House of Delegates and Council of C.M.A., the committee on postgraduate activities has held two meetings in 1947.

By action of the Council of C.M.A., funds were allocated to organize and institute a program of postgraduate education for the benefit of the C.M.A. members.

In view of the fact that the geography of the state is peculiar in comparison with other states, the committee has investigated the application of postgraduate plans in operation elsewhere that might be applied to our membership. With the problem in mind the committee proposed that a full time or part time director be selected to carry on the postgraduate activities under the direction of the committee. This proposal was accepted by the Council of the C.M.A. and C. B. Andrews, M.D., selected on a half time basis at a salary of $500 per month as the director of postgraduate activities beginning January 1, 1948.

The committee has felt that the first duty of the director would be to survey postgraduate plans in operation in various other states. This survey will begin early in 1948 following which a curriculum will be established with outstanding medical educators participating as faculty.

In the interim of the establishment of the definitive program by the C.M.A. the committee proposes that a complete up to date list of available postgraduate courses at the medical schools and hospitals in California be published in CALIFORNIA MEDICINE and further that the director maintain at the association offices complete information concerning such courses available to members of C.M.A.

Respectfully submitted,

JOHN C. RUDDOCK, *Chairman*

COMMITTEE ON SCIENTIFIC WORK

To the President and the House of Delegates:

The Committee on Scientific Work has held several meetings during the year. As a result of the poll of Section Officers (described in last year's report), a majority have indicated their desire for more General or Joint Section Meetings without, however, abandoning a few special section meetings. The Committee has therefore planned some large group meetings for the 1948 Session, but, owing to the increasing size of the Association, has been compelled to utilize theaters in which to house these combined section meetings. It is anticipated that as many as 1,000 members will be attending some of them this year.

The problem of space for scientific exhibits is still poorly solved. The Committee hopes to have available a small amount of space this year, but not in an ideal location. Provision of space for scientific motion pictures will also be attempted. Perhaps the use of hospital auditoria in the town in which the meeting is to be held may be a partial solution to this latter question.

It has been customary for many years to have three invited guest speakers at each meeting, one chosen by the President, one by the Section on Medicine and one by the Section on Surgery. The Council voted this year to increase the number of official guests to five, three being chosen as above, and two by the officers of each of the other Scientific Sections in alphabetic rotation. Therefore, this year, the Sections on Anesthesiology and Dermatology will have an official guest speaker, with expenses defrayed by the Association.

Arrangements for holding meetings of other scientific societies during the Annual Meeting of the California Medical Association were considered at length by the Committee. After much correspondence and deliberation the following policy was adopted:

"The Annual Meeting of the California Medical Association is primarily for the benefit of the members of that Association. The meeting permits dissemination of scientific facts pertaining to new or important medical matters and research work, plus interchanges of opinions on better methods for the distribution of medical care and other organizational problems. It requires the support of *all* its members in order to develop the highest type of scientific program.

"Some California physicians are members of other special societies or organizations which desire from time to time to hold scientific meetings *during* the Annual Meetings of the State Medical Association. For this reason, the Committee on Scientific Work, after careful deliberation during the years 1946 and 1947, adopted the following policy:

1. Medical organizations wishing to hold meetings concurrent with the Annual Meeting of the California Medical Association are requested to plan such meetings so that they do not conflict with the scientific or other programs of the state medical organization. This will usually entail the special society holding its meeting *prior to or subsequent to* the three and one-half days required for the state meeting.

2. Medical organizations wishing to hold a short one or two hour organizational meeting *during* the C.M.A. meeting are welcome to do so, with due announcement in the Journal and program, provided no formal scientific session is planned which might conflict with the regular session.

3. Scientific papers prepared by C.M.A. members for presentation in connection with the Annual Meeting should be offered to the appropriate Section of the C.M.A., and thereby be available for publication in the State Journal."

That the work of the Committee has not been entirely in vain is evidenced from the editorial which appeared in the Bulletin of the Los Angeles County Medical Association for June 5, 1947. It is quoted herewith so that the members who worked so hard to make that meeting a success may read how others felt about their efforts:

"The seventy-sixth annual meeting of the California Medical Association last month at the Biltmore Hotel was one of the most successful in the history of organized medicine in this state. With a registration approaching three thousand, with a plethora of excellent scientific papers and exhibits, with a release from the tension of war and postwar conditions, the meeting had some of the old verve of the Del Monte days. . . .

"Those who missed the scientific papers and discussions will probably have the opportunity to read about the progress and achievements of medicine in this state in CALIFORNIA MEDICINE or other scientific journals."

Respectfully submitted,

L. HENRY GARLAND, *Chairman*

ANNUAL REPORT OF THE CANCER COMMISSION

To the President and House of Delegates of the California Medical Association:

The Cancer Commission has made slow but steady progress on the program outlined to you in 1946. As the Commission did not have a full-time paid Medical Director during this period, all of the responsibility has fallen on the members of the Commission. As of March first, Dr. F. R. Hook, a distinguished surgeon, will join the Commission as its Medical Director and will make possible a more energetic and comprehensive program.

During the past year the 1947 revision of "Cancer Commission Studies" has appeared in monthly chapters in CALIFORNIA MEDICINE through the courtesy of the Editorial Board of that Journal. The revision is complete and the chapters will continue to appear monthly.

The Cancer Commission has endeavored to stimulate *periodic physical examinations of well persons in the older age*

groups amongst all the members of the California Medical Association. A record blank for these examinations was prepared and sent to every member of the California Medical Association. The Commission will furnish to all members upon request necessary blanks to fit the standard types of files in order to facilitate records of this examination.

During the year, through the cooperation of the California Department of Health and the Cancer Commission, cancer surveys have been conducted in San Diego, San Francisco, San Mateo, and Butte-Glenn Counties. It is the purpose of both the Department and the Commission to continue these surveys with participation of the county medical societies throughout the state as rapidly as the cooperation of those societies can be obtained.

The California Department of Public Health has made a grant to the Medical Association to finance the production of a sound motion picture film on "The Diagnosis of Cancer of the Breast." This film has gone into production and will be available in the near future to county medical societies and hospital staffs.

The Pre-Convention *Conferences* in *Radiology and Microscopic Tumor Pathology* are increasing in attendance and interest, from 100-200 physicians being present at the 1947 sessions. The mid-year conference in Microscopic Tumor Pathology held in December in Santa Barbara was attended by 75 physicians.

Universities both in San Francisco and Los Angeles have cooperated with the Cancer Commission in conducting *refresher courses on cancer* for physicians. The fall course was held at the Los Angeles County General Hospital in October. Spring refresher courses have been held under the direction of the University of California and Stanford University in San Francisco and the Tumor Board of the Los Angeles County General Hospital. These courses are subsidized by the California Division of the American Cancer Society and are without charge to the attending physicians.

The Commission has sponsored "Cancer Days" and Cancer Meetings for county medical societies. The Commission has provided full day programs on cancer or speakers for evening meetings wherever requested by the county medical society. This is a three-way program sponsored by the California Department of Health, the California Division of the American Cancer Society, and the Cancer Commission.

During the year the Bulletin of Cancer Control has been published in cooperation with the California Division of the American Cancer Society. The mailing list has now reached better than 3,500.

California Division, American Cancer Society. Three years ago, the Council of the California Medical Association authorized the members of the Cancer Commission to serve on the Board of Directors of the California Division of the American Cancer Society. The organization started in 1945 in a small two-room office with one secretary. Through a hectic adolescence due to lack of experienced lay personnel this organization has gradually developed into an effective business organization. Prominent lay leadership has been enlisted and are taking active interest in the program. Mr. Gurney Newlin of Los Angeles, the President, has had long executive experience in voluntary welfare work. Mrs. W. P. Fuller, Jr., State Commander, is an outstanding leader with rare tact and judgment. The ten lay members of the Board of Directors are well known throughout the state as business men and leaders in community welfare. In the administrative office, Mr. L. V. Griffith, one of the outstanding workers in California in community organization, is acting as Executive Vice-President. Mrs. Joseph A. Blaney, Program Director, has been National Deputy Commander of the American Cancer Society and comes to California with a wealth of experience on the national level. Dr. F. R. Hook who assumes the position of Medical and Scientific Director of the California Division is an experienced surgeon and organizer and is well known to many of the physicians in the state.

The 1948 campaign will be conducted in California on the basis of *hope*. The emphasis will be placed on the fact that approximately 10,000 cases of cancer are now being cured by the physicians in California, and that 10,000 more can be cured if they are detected early and receive prompt efficient treatment.

The California Division is cooperating with the California Medical Association in grants for the publication of "Cancer Commission Studies," in the subsidy of refresher courses, subsidy of cancer consultation boards, and in the subsidy of cancer conferences in non-metropolitan areas.

California Department of Public Health. The Cancer Commission is receiving wholehearted support and cooperation from Dr. Lester Breslow and Dr. James W. Ellis from the California Department of Public Health. Both organizations are cooperating in cancer surveys, cancer conferences in non-metropolitan areas, and in the educational film on "The Diagnosis of Cancer of the Breast." Both organizations are working together in stimulating the formation of Tumor Boards throughout the state. Very substantial grants have been made by the Department of Health to this work.

Again the Cancer Commission extends to the Council and to the House of Delegates thanks and appreciation for their confidence and support during the past year.

Respectfully submitted,

LYELL C. KINNEY, M.D.

ADVISORY PLANNING COMMITTEE

To the President and the House of Delegates:

The Advisory Planning Committee met regularly during 1947 and submitted reports to each meeting of the Council. The minutes of the committee's meetings are not printed but are found in the Council minutes. The committee has held one meeting with the standing Committee on Medical Economics and is cooperating with that committee in its study of physician-patient relationships as a basis for a long-range public relations program. The Advisory Planning Committee stands ready to cooperate similarly with any other standing or special committee, on instructions from the Council.

During the year the membership of the committee was increased by the appointment of Mr. Vance Venables, executive secretary of the Kern County Medical Society. This appointment was made, in accordance with House of Delegates instructions, by the C.M.A. Council.

Respectfully submitted,

JOHN HUNTON, *Chairman*

THE COMMITTEE ON ORGANIZATION AND MEMBERSHIP

To the President and the House of Delegates:

There are still over four thousand practicing physicians of the State of California who are not members of the state medical association, according to figures presented below. However, there has been a substantial increase in state association membership during the past year. The large influx of population into Los Angeles County has been reflected in the increase of the 1947 Los Angeles County membership over 1946. The total number of physicians practicing in Los Angeles has reached an all-time high of 5,869. Of these, 4,038 belong to the County Association. The same proportion of state association membership to the medical population seems to exist throughout the state. The physician population in percentage total to the lay population is high, higher than in most states of the Union. This high incidence of physicians in California was brought about by the large influx of medical men during and after World War II. The California Medical Association is the third largest state association in the U.S.A.

The appended resume has been prepared by the central office.

Respectfully submitted,

CARL L. MULFINGER, *Chairman*

C.M.A. County Society Membership Totals For Calendar Year 1947

County Medical Societies	Membership in 1946	Number Licensed Physicians *(1946 Directory)	Membership in 1947	Number Licensed Physicians *(1947 Directory)
Alameda	659	884	673	1,062
Butte-Glenn	38	46	36	58
Contra Costa	65	115	79	138
Fresno	165	160	175	201
Humboldt	39	42	34	52
Imperial	23	26	25	28
Inyo-Mono	8	8	9	10
Kern	87	108	99	142
Kings	23	25	23	25
Lassen-Plumas-Modoc	13	7	13	23
Los Angeles	3,472	4,019	4,038	5,869
Marin	56	77	66	90
Mendocino-Lake	24	34	24	36
Merced	31	31	27	48
Monterey	68	90	75	116
Napa	39	57	45	68
Orange	147	179	172	228
Placer-Nevada-Sierra	30	58	33	53
Riverside	80	120	87	149
Sacramento	185	211	209	241
San Benito	6	9	7	9
San Bernardino	193	207	192	276
San Diego	391	499	400	630
San Francisco	1,292	1,572	1,239	2,009
San Joaquin	123	120	123	152
San Luis Obispo	25	33	35	41
San Mateo	111	132	135	178
Santa Barbara	125	130	127	167
Santa Clara	242	270	287	366
Santa Cruz	47	59	54	71
Shasta	15	17	17	22
Siskiyou	11	17	11	19
Solano	51	74	53	91
Sonoma	69	85	78	103
Stanislaus	57	57	45	70
Tehama	7	11	9	12
Tulare	49	72	60	75
Ventura	62	69	53	95
Yolo	27	22	26	24
Yuba-Sutter-Colusa	25	25	27	33
Total	8,180	9,777	8,920	13,080

* Note: The numbers of licensed physicians under the respective counties are those which appear in such listings of the 1946 and 1947 Directory of State Board of Medical Examiners.

CALIFORNIA PHYSICIANS' SERVICE

To the President and the House of Delegates:

This report on the activities of California Physicians' Service in 1947 is preliminary, and will be supplemented by the Annual Report at the meeting of the House of Delegates in April.

From the time of the last annual meeting of Administrative Members through December of 1947, the Board of Trustees has held seven regular meetings, two of which were two-day meetings. Because of the growth of C.P.S. and the consequent increase in complexity of operations, the board has found it necessary to meet monthly rather than bi-monthly. The Executive and Finance Committees of the board have met frequently, and held one joint meeting with the Executive Committee of the C.M.A. Council.

As of December 1, 1947, the total beneficiary membership of C.P.S. on a state-wide basis was 517,097. In line with efforts to put all phases of C.P.S. on a sounder business basis, enrollment activities have centered on building up percentages in existing groups. As a result, two-thirds of the enrollment during the past year represented additions to existing groups, and the remaining one-third represented new groups enrolled.

Further implementing this, the board put into effect stringent new underwriting rules intended to improve the selection of risk. New groups must have 75 per cent participation; payroll deduction is required of all new groups; existing groups of 13 or less have been put on a quarterly billing basis; an employee in an existing group who did not become a C.P.S. member when first eligible must complete a "Qualification for Membership Statement" which includes a comprehensive medical history; employers are now required to complete an application for a group contract. All of these new rules are designed to put C.P.S. underwriting on a sounder basis and to reduce administrative costs.

One of the most outstanding achievements during the year arose out of a meeting with the Board of Directors of H.S.S.C. In Southern California, C.P.S. and the Blue Cross Plan function jointly, and joint operations have presented various problems and difficulties in the past. As a result of the meetings of the two boards, a Joint Control Committee, with representation from both boards, was appointed to draft a joint operating agreement and establish policy for joint operations. The results have been most satisfactory, and I am sure I can speak for the members of both boards in stating that future operations should present no great difficulty.

Physician membership in C.P.S. as of December 31 totalled 8,652. Beneficiary members may secure services of physician members in all parts of the state, and no particular problems have arisen.

During the year the board established Special Reviewing Committees, consisting of physician members of the board representing the different geographical areas of the state, to handle any difficulties arising between physician and patient under the Veterans' Program as well as the Commercial Program. General Hawley has strongly commended the Board of Trustees for the establishment of these committees.

C.P.S. headquarters in San Francisco have moved to new and larger offices, which has done much to increase efficiency.

This report is merely a condensed summary. A full report of C.P.S. activities during the year will be given at the Annual Meeting of Administrative Members.

Respectfully submitted,

CHESTER L. COOLEY, *Secretary*
Board of Trustees

COMMITTEE ON ASSOCIATED SOCIETIES AND TECHNICAL GROUPS

Executive Group

Peter Blong, Chairman, 1949
Edward F. Nippert, 1948 Robert A. Scarborough, 1950

To the President and the House of Delegates:

This committee has met with a liaison committee from the California State Nurses' Association. As it has been very well pointed out by a former chairman, Dr. John V. Barrow, it would be of profit to both Associations to have a representative from the Nurses' Association on our own state program.

The matter of signed, standing orders for industrial nurses was referred to this committee. It was thought desirable, for the protection of all concerned, to have worked out, signed, standing orders for the industrial nurse. A directive could well come from the House of Delegates in regard to the same.

This committee strongly urges a program of economic medicine at our state meeting. An effort should be made to get our younger members back of such a movement.

A technical group would do well to take up the matter of health insurance, and such a group should be encouraged by some reward. Lay assistants of high technical caliber should be included more and more in our Association.

The United Public Health League is filling a well defined economic need. This committee would commend the President, Dr. Dwight Murray, for his tactful leadership in that rapidly expanding movement. In our present economic shuffle it can be said that medicine can no longer hide its light under one basket.

Respectfully submitted,

PETER BLONG, *Chairman*

REPORT OF EDITORIAL BOARD CALIFORNIA MEDICINE

To the President and the House of Delegates:

The members of the Editorial Board are:

Chairman of the Board:
Dwight L. Wilbur, San Francisco

Executive Committee:
Lambert B. Coblentz, San Francisco
Albert J. Scholl, Los Angeles
H. J. Templeton, Oakland
Dwight L. Wilbur, San Francisco

Anesthesiology:
William B. Neff, San Francisco
Charles McCusky, Los Angeles

Dermatology and Syphilology:
Paul Foster, Los Angeles
H. J. Templeton, Oakland

Eye, Ear, Nose and Throat:
Frederick C. Cordes, San Francisco
Lawrence K. Gundrum, Los Angeles
A. R. Robbins, Los Angeles
Lewis Morrison, San Francisco

General Medicine:
Mayo H. Soley, San Francisco
O. C. Railsbach, Woodland
Lambert B. Coblentz, San Francisco
John Martin Askey, Los Angeles
W. E. Macpherson, Los Angeles

General Surgery:
Frederick L. Reichert, San Francisco
C. J. Baumgartner, Beverly Hills

Orthopedic Surgery:
Frederic C. Bost, San Francisco
Hugh Jones, Los Angeles

Thoracic Surgery:
John C. Jones, Los Angeles
H. Brodie Stephens, San Francisco

Industrial Medicine and Surgery:
Rutherford T. Johnstone, Los Angeles
John E. Kirkpatrick, San Francisco

Plastic Surgery:
George W. Pierce, San Francisco
William S. Kiskadden, Los Angeles

Neuropsychiatry:
Karl N. Bowman, San Francisco
John B. Doyle, Los Angeles

Obstetrics and Gynecology:
Daniel G. Morton, San Francisco
Donald G. Tollefson, Los Angeles

Pediatrics:
E. Earl Moody, Los Angeles
William G. Deamer, San Francisco

Pathology and Bacteriology:
Alvin G. Foord, Pasadena
Alvin J. Cox, San Francisco

Radiology:
R. R. Newell, San Francisco
John W. Crossan, Los Angeles

Urology:
Albert J. Scholl, Los Angeles

Pharmacology:
Hamilton H. Anderson, San Francisco
Clinton H. Thienes, Los Angeles

Public Health:
George Uhl, Los Angeles
Charles E. Smith, San Francisco

The Executive Committee of the board met twice during the year to review operations of CALIFORNIA MEDICINE and consider proposals for developing sources of editorial material.

Members of the Editorial Board, called upon to review a greater number of manuscripts than in the preceding year, carried out this work with gratifying dispatch.

During the year, Dr. Hamilton Anderson, chairman of the Division of Pharmacology and Experimental Therapeutics of the University of California Medical School, accepted appointment to the Editorial Board to fill a vacancy caused by the resignation of Dr. Windsor C. Cutting.

No appointment has yet been made to fill the vacancy on the board caused by the death of Dr. Clark Johnson in January of this year.

Respectfully submitted,

DWIGHT L. WILBUR, *Chairman.*

COMMITTEE ON RURAL MEDICAL SERVICE

To the President and the House of Delegates:

This committee was activated through the initiative of Regional Director of the A.M.A. Committee, J. Frank Doughty, M.D., Tracy. With this able assistance and advice the first California Rural Health Conference was held in Sacramento, December 6, 1947. Representatives of the several major farm organizations, State and County Health Departments, State Dental Association, State Nurse Association, P.-T. A., Taxpayers League and other interested bodies participated. The response was gratifying and interest encouraging with hopes expressed for continued similar conferences.

Your chairman attended the National Rural Health Conference, Chicago, February 5 and 6, 1948.

Respectfully submitted,

CARROLL B. ANDREWS, *Chairman*

REPORT OF COMMITTEE ON LOCAL ARRANGEMENTS

To the President and the House of Delegates:

The Committee on Local Arrangements has been pleased to cooperate with the officers of the California Medical Association in making suitable arrangements for the 1948 Annual Session. The Association has not met in San Francisco for a number of years and the committee welcomes the 1948 meeting. We hope all those attending the session will be comfortable and will enjoy a fine session in keeping with the highest standards. The committee is prepared to give every possible service toward this end.

Respectfully submitted,

ROBERTSON WARD, *Chairman*

Roberto F. Escamilla, *Vice-Chairman*
Dorothy W. Atkinson
Lois Brock
Francis L. Chamberlain
Lambert G. Coblentz
G. Dan Delprat
Mr. Frank J. Kihm, *Secretary*
Marius A. Francoz
Salvatore P. Lucia
M. Laurence Montgomery
Sidney J. Shipman
Forrest M. Willett

PHYSICIANS' BENEVOLENCE COMMITTEE

To the President and the House of Delegates:

As in 1946, the principal benevolences disbursed by the Physicians' Benevolence Committee during 1947 were made to the Los Angeles County Physicians' Aid Association, which has been paid $500 each month. In addition, a total of $500 in contributions to three other needy physicians was made during the year, making a total disbursement by the fund of $6,500 for the calendar year 1947.

The committee had receipts of $10,793.52 during 1947, the major part of which came from the California Medical Association general funds under the By-Law provision which sets aside one dollar per active member for this fund each year. The Woman's Auxiliary to the C.M.A. contributed $2,663.52 in 1947, the largest contribution yet made by the Auxiliary and most certainly a generous move which deserves the sincere thanks of all Association members.

At the close of 1947, the Physicians' Benevolence Fund showed total assets of $21,457.57, held in savings and commercial accounts. This sum is due to be increased somewhat in early 1948 when the Association completes its contribu-

tion of one dollar per member; the C.M.A. regularly makes its major contribution to the fund in June or July, when Association membership is fairly well established, then completes the contribution following the end of the year, when the final membership is fully recorded.

The Committee has recently been investigating the possibilities of needy physicians or their families being cared for in the proposed home to be built by the Los Angeles County Physicians' Aid Association. This point has arisen because of the fact that the fund contributes $500 each month to the Los Angeles organization, a contribution undertaken two years ago on the assumption that needy physicians from all California counties would be provided for in this home, when it is built. This question is now being explored and it is hoped that a satisfactory working arrangement may be made with the Los Angeles group.

Respectfully submitted,

AXCEL E. ANDERSON, *Chairman*

ANNUAL COUNTY MEDICAL SOCIETY REPORTS

FIRST DISTRICT

Imperial, Orange, Riverside, San Bernardino, and San Diego Counties.

John D. Ball, Santa Ana, *Councilor.*

Orange County Medical Association

Our membership has continued to increase during the past year, as a result of which we now are entitled to four delegates instead of three. The meetings have been well attended and many excellent programs obtained. One problem we face is a place large enough to hold a meeting, especially a dinner meeting.

During the year we have obtained group accident and health insurance for our members. We have also spent a great deal of time and thought on arranging that proper malpractice insurance is also available.

LLEWELLYN E. WILSON, *Secretary*

Riverside County Medical Association

An annual out of town meeting of the Riverside County Medical Association was held at Palm Springs. Dr. John Cline was guest speaker at the 1947 meeting.

The second Monday of each month at 8:00 p.m. the Association meets at the Riverside Community Hospital. A scientific program is presented and is followed by a business session.

The Secretary of the Association publishes a monthly bulletin which is distributed the first week of each month.

CECIL J. LORD, *Secretary*

The San Bernardino County Medical Society

The membership of the San Bernardino County Medical Society is constantly growing, increasing from 188 members in 1946 to 203 at the present time, with other names soon to be added. The number of doctors has increased over and above the proportionate increase in the population, and this change holds true in both city and rural areas.

Efficient handling of the executive duties of the society has been made easier with the hiring of Mrs. Judy Fox as full-time assistant to the Secretary, Dr. Carl M. Hadley. Mrs. Fox is managing editor of the San Bernardino County Medical Bulletin which has been doubled in size with a corresponding increase in advertising revenue, which in turn makes possible a more attractive and interesting Bulletin under the editorship of Dr. Hadley.

An active interest in the society is being maintained under the leadership of the new president, Dr. Meredith G. Beaver. This interest is reflected in the excellent attendance at all meetings which is due in a large way to the very fine programs which have been arranged by the Program Committee under the chairmanship of Dr. J. C. Carmack.

Another active committee is the Cancer Committee, with Dr. James R. Savage as chairman. The work and scope of this committee has been increased with the establishment of a local branch of the American Cancer Society, and a strong educational and clinical program is under way.

CARL M. HADLEY, *Secretary*

San Diego County Medical Society

The San Diego County Medical Society closed 1947 with a membership of 401 and 80 applicants on the waiting list. During the year 44 new members were admitted and several have retired from active practice. The growth of the Society has more than justified its action last year in securing the services of an Executive Secretary. Mr. K. C. Young has been more than busy since he assumed that position. He has lightened the Secretary's load tremendously. The past year has seen the establishment of the Society headquarters on the ground floor of the Medico-Dental Building together with that of the Doctors Service Bureau. The new office space is also shared with the local chapter of the Cancer Society, which arrangement affords opportunity for closer liaison with that organization.

Public relations on a larger scale have been carried out in 1947 than in any year in our history. A scientific exhibit was prepared for the annual "show" of the local Council of Technical Societies which the Society has joined. It proved to be of quite some interest to the public. An astounding amount of effort was put forth under the leadership of Dr. T. F. O'Connell in the establishing of a Blood Bank in cooperation with the Naval Hospital, the Red Cross, the various hospitals, and the city and county authorities. It is well on its way to afford blood and the various blood preparations for the city and county. Under the direct handling of our Executive Secretary several series of radio broadcasts have been presented over local radio stations. Many other activities have been directed by Mr. Young through the newspapers and other media of contact with the public.

Under the sponsorship of the Society and the Health Department a Maternal and Neonatal Welfare Committee has been established with the purpose of studying the problems of maternal and neonatal welfare, having in view the lowering of the morbidity and mortality rates among mothers and newborn. A survey has been conducted by the Cancer Commission and steps are being taken to present refresher courses in cancer detection and treatment, a diagnostic clinic having been established at Mercy Hospital. Cancer prevention work was given additional momentum through the preparation of a panel of members of the Society who would handle carcinoma cases in cooperation with the local chapter of the Cancer Society and the Cancer Commission.

Plans were laid in 1947 for the further education or refreshening of the members of the Society. Postgraduate lectures have been given at the County Hospital and additional training in the basic sciences for the intern staff is being prepared. A general refresher course under the direction of Dr. Griffith and the University of Southern California has been started and will be continued indefinitely into the future.

Plans for additional hospital beds have progressed slowly but surely. The high cost of materials continues to be an effective stumbling block, but hopes are still held for a bettering of the general situation. Practically all, if not all of the hospitals in the city and county now have organized staffs with staff regular meetings and scientific programs and discussions, regardless of the size of the institutions. This is a tribute to the interests of both hospital authorities and staff members in the advancement of the care of the patients. A 200 bed Veterans' Hospital is still in the talking stage though 1948 may see the definite allocation of such an institution to this area and the beginning of actual construction.

C.P.S. continues to function both with regard to non-veteran and veteran needs. The local medical staff of the Veterans Administration with its outpatient facilities handles the bulk of the ex-service patients, but a fair amount of service is rendered by the civilian members of the profession with apparent satisfaction to all concerned.

We are looking forward to 1948 with high hopes of continued progress and a careful eye to the economic and legislative problems that are sure to arise.

W. H. GEISTWEIT, JR., *Secretary*

SECOND DISTRICT

Los Angeles County.

Jay J. Crane, Los Angeles, *Councilor.*

Los Angeles County Medical Association

The Los Angeles County Medical Association had the usual busy year in 1947. A large influx of new membership, predicated principally on the increase in medical population of the county, was the source of an all-time high in total membership.

An indoctrination program for new members was continued. Many of the newer members and the returned

veterans are taking an active part in the Association affairs. The medical veterans group has been socially active and its get-togethers have been the source of renewed acquaintances for many of the returned service men.

Part of the Association's activities are now ensconced in a refurbished building on Westlake Avenue, north of the main building. In this building are the headquarters of the County Division of the American Cancer Society and the offices of the publications of the Association. This removal of part of the office force from 1925 Wilshire Boulevard to Westlake Avenue again makes available the dining room for section meetings.

Financially, the Association is in a satisfactory condition. Quarterly statements were sent out to the members giving a detailed account of expenditures and assets. The Library continues to grow in importance as a repository for printed medical knowledge, and as an available place for those engaged in research projects to carry on necessary work in medical literature.

Due to the size of membership and numerous activities, the Board of Trustees and the Council had an unusually heavy agenda at their meetings. This work was in most instances dispatched with proper eclat, but the unfortunate incident of the matter of professional rebates marred an otherwise constructive year. Because of hesitant action on the part of the Council and officers during the year 1947, a lay organization seized the opportunity to report to the press of the nation of activities that were detrimental to the good name of the profession of this community. This oversight on the part of the Council was rectified in the first meeting of 1948 by having that body adopt a set of rules and regulations that make rebating inconsonant with membership in the Association.

The Physicians' Aid Association, the Woman's Auxiliary, the new Research Foundation, and the numerous scientific and geographical sections all made outstanding progress during the year 1947.

C. L. MULFINGER, *Secretary*

THIRD DISTRICT

Inyo-Mono, Kern, San Luis Obispo, Santa Barbara, and Ventura Counties.

Harry E. Henderson, Santa Barbara, *Councilor.*

Inyo-Mono County Medical Society

The Inyo-Mono County Medical Society has had a quiet year during 1947. We have had our monthly meetings in Bishop and Lone Pine alternately, thus somewhat equalizing the travel difficulties, as the Northern and Southern limits of our members' residences are over 200 miles.

Two new physicians have moved into our area. We will welcome them into our membership when their required six months' residence has passed, as they are both ethical young men.

L. S. BAMBAUER, *Secretary.*

Kern County Medical Society

The Kern County Medical Society has wound up the year 1947 in a state of activity which characterized the progress of the entire year. The last month of the year witnessed the culmination of many projects begun at various times throughout the year and registered definite success in the solution of the long-standing Kern County hospital problem.

Of immediate concern and benefit to the individual members of the Society were such activities as the securing of a group malpractice insurance plan, a group health and accident insurance policy, the sponsoring of a symposium on cancer under the auspices of the American Cancer Society, and the extension of University of Southern California School of Medicine to doctors of the community.

During the year, a full-time Office of Executive Secretary was established, and the Medical Economics Council was organized. A rheumatic fever clinic was established and funds for its operation assured through the Kern County Shrine Club. A positive program of public relations through the office of Executive Secretary and the practice of good medical economics was inaugurated.

As a positive step toward the solution of the Kern General Hospital dispute, which has been a blight on the progress of medicine in Kern County for many years, an ordinance providing for a seven-man commission to govern the hospital was enacted.

Those in office during this year of unusual activity were James T. Stanton, President, and Frederick O. Wynia, Secretary-Treasurer. Elected to provide leadership for the year 1948, which will be an equally active and fruitful year, were Frederick O. Wynia, President, and John J. Cawley, Secretary-Treasurer; and to the Board of Directors, James T. Stanton and Robert E. Scherb.

Through the office of the Medical Economics Council, new services in auditing, accounting, billing, collecting, and office management will be provided for doctors, said services being of a specialized nature and devised particularly to bring about better economic relations between the doctors and their patients.

FREDERICK O. WYNIA, *Secretary*

Santa Barbara County Medical Society

The Santa Barbara County Medical Society now comprises about 140 members. A fair number of applications for membership are pending.

During the year 1947 the Society took measures to protect its individual members, both from the standpoint of health and accident, and malpractice insurance. The malpractice protection which we now have entailed the formation of a medical defense committee. According to statistics, where this mechanism prevails there has been a decided improvement in patient-doctor relationship.

The Santa Barbara County Medical Society has also fostered the formation of the Citizens' Advisory Council of Santa Barbara, an organization which is comprised of members of many civic, social welfare, and business groups in Santa Barbara, for the purpose of improving health and hospital care in this community.

During the year the members living in and around Santa Barbara assessed themselves $25 each, for continuation and maintenance of the medical library.

We consider ourselves very fortunate in having procured a number of well known and interesting speakers during the year:

January: During the annual banquet meeting Dr. Robert R. Newell from Stanford University, Department of Radiology, entertained us with his experiences at "Operations Cross Roads at Bikini Atoll."

February: Dr. Karl M. Bowman, Superintendent and Medical Director of the Langley Porter Clinic of the University of California, San Francisco, spoke on "Some Concepts of Psychosomatic Medicine."

March: Dr. Garnett Cheney, clinical Professor of Medicine at Stanford University, spoke on "Leptospiral Infections in Man and Dog."

April: A group of doctors, including Dr. Walter Anderson, Dr. Reginald Smart, Dr. William H. Carnes, and Dr. Tony Lanza, presented a panel discussion on pneumoconiosis caused by Crystoballite in the Diatomaceous earth industry.

May: Dr. Frederic Shidler, Department of Surgery of the Stanford Medical School, spoke on "Carcinoma of the Rectum and the Large Bowel."

June: The hospitality of the Santa Marie doctors was again extended to the Society members. Phil Reagan, M.D., and counselor, presented a resume of the present status of malpractice.

September: Dr. Jurgen Ruesch, of the University of California Medical School, spoke on the subject of "Personality in Chronic Illness."

October: Dr. Emil Holman, Professor of Surgery at Stanford University, presented his paper on "Problems of Gastric Cancer."

Also in October a special meeting was held to enable the members of the Society to hear Dr. H. Winnette Orr, Orthopedic Surgeon from Lincoln, Nebraska, internationally known for the treatment of osteomyelitis, known as "The Orr Method."

November: Dr. Thomas Addis, Professor of Medicine, Stanford University, spoke on "Acute Gomerulonephritis."

December: Dr. Harry Goldblatt, Director of Research at Cedars of Lebanon Hospital, spoke on "The Renal Origin of Hypertension."

At the December meeting new officers elected were: President, Charles A. Preuss, M.D.; President-Elect, Rodney F. Atsatt, M.D.; Vice-Presidents at large, Horace Coshow, M.D., and Albert M. Beekler, M.D.; Secretary-Treasurer, Douglas F. McDowell, M.D.; Delegates, Alfred B. Wilcox, M.D., Harry C. DeVighne, M.D., and Douglas F. McDowell, M.D.; Alternates, D. H. McNamara, M.D., H. V. Findlay, M.D., and Hugh Friedell, M.D.; Council, Clifford Jones, M.D., Lawrence Heiges, M.D., J. Gary Campbell, M.D., Harold Schwalenberg, M.D., and Charles A. Preuss, M.D.

DOUGLAS F. MCDOWELL, *Secretary*

Ventura County Medical Society

The Ventura County Medical Society had 57 active and four retired members at the close of the year. There are ten applications for membership on file.

Meetings are held on the second Tuesday of each month at the Colonial House in Oxnard. The meetings are preceded by a dinner. Twelve meetings were held during the past year. They are divided into two parts, the first part

is devoted to a scientific paper and discussion with the second part given over to the discussion of the economic and organizational phases of medical practices.

Although there has been no improvement in the hospital bed and nursing situations during the past year, we have hope for improvement this year as both of the private hospitals have funds for building additions.

Funds for a Cancer Detection Center have been made available and it will start to function as soon as the necessary equipment arrives. We are also conducting a survey to determine the causes of our high infant mortality rate in this county. We are continuing to stress public relations and to cooperate with the allied professions.

A. A. MORRISON, *Secretary*

FOURTH DISTRICT

Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare, and Tuolumne Counties.

Axcel E. Anderson, Fresno, *Councilor.*

Fresno County Medical Society

During the year 1947 the Fresno County Medical Society held nine meetings.

Scientific subjects were featured at all meetings and out of town guest speakers from the various medical centers in California were made available for our use.

During the past year the County Society has availed themselves of a group health and accident insurance policy which has been successful to date.

The Society is contemplating obtaining the services of an executive secretary and is beginning to place emphasis on attempting to procure more reasonable malpractice insurance rates.

Many new physicians have come into the Fresno area during the year and office space is still at a premium.

W. N. KNUDSEN, *Secretary*

Kings County Medical Society

During the past year monthly meetings have been held in the Kings County Medical Society. Although our membership is small we have a very loyal group.

WILLIAM F. CHAMLEE, *Secretary*

Merced-Mariposa Counties Medical Society

Dinners before meetings have been dispensed with since last year, because the business sessions seem to be more successfully conducted when the social amenities are absent.

The Society continues to staff the County Hospital and cordial relations are maintained with the manager and the County Supervisors. The funds that are eventually collected from cases at the County Hospital for medical attention go into the Society Treasury and makes it possible for us to get along without any dues assessments and leaves enough more to give a nice party or picnic when desired.

The postwar membership muddle is now cleared and there are 26 members and three applications for membership are pending. This is an increase over last year of four members.

JAMES A. PARKER, *Secretary*

San Joaquin County Medical Society

The year 1947 has been a red letter year for the San Joaquin County Medical Society under the leadership of Dr. J. O. Eccleston, president. The Society can be justifiably proud of the many accomplishments.

The membership has shown a net increase of 12 physicians. Nine excellent scientific programs have been presented with good attendance by the members of the Society. Among the more important projects undertaken by the Society should be mentioned the following:

1. Under the leadership of Dr. Donald Harrington the Society has sponsored the organization of a blood bank. This project is rapidly approaching a successful initiation and the bank is expected to open early in 1948.

2. Dr. C. A. Broaddus for the tenth year served as Chairman of the Postgraduate Study Club and brought a series of prominent lecturers to the area.

3. The Society sponsored a "Voluntary Health Insurance Week" at the request of the public relation experts of the C.M.A.

4. Active professional guidance has been provided by the Society to the organization of a Cancer Society.

5. The Society cooperated with the Health Department and the Tuberculosis Society in the organization of a Consultative Rheumatic Fever Clinic.

The following Scientific papers have been presented:

January 9, 1947—"Blood Banks," Dr. Joseph More.

February 6, 1947—"Recent Advances in Cardiology," Dr. Francis Chamberlain.

March 6, 1947—"The Program of the C.M.A.," Mr. John Hunton.

April 3, 1947—"The Newer Antiobiotics," Dr. Henry Grainerd.

May 8, 1947—"Tuberculosis Case Finding by this Private Physician," Dr. Sidney Shipman.

June 5, 1947—No Scientific Papers.

September 4, 1947—"Problems of Malpractice," Mr. Dudley Shepherd.

October 2, 1947—"Acute Cholecystitis," Dr. Leon Goldman.

November 6, 1947—"Anxiety States," Dr. Wm. Titley.

December 4, 1947—"The Rh Factors," Dr. Robert Evans.

H. D. CHOPE, *Secretary*

Stanislaus County Medical Society

Regular scientific and business meetings were held by the Stanislaus County Medical Society during the year 1947.

A special activity of the Society for the year has been the organization of a Tumor Board to work on the problem of Cancer in cooperation with the Cancer Commission of the California Medical Association.

J. LYLE SPELMANN, *Secretary*

Tulare County Medical Society

Regular monthly meetings of the Tulare County Medical Society were held throughout 1947 with Dr. F. R. Guido presiding. Death claimed two of the most prominent and active members of the Tulare County Medical Society, Dr. W. A. Preston and Dr. I. H. Betts, both residents of Visalia.

During the year the total active membership of the Society has shown a marked upward trend with new names being added to the roster almost every month. Many distinguished speakers from all parts of the state were heard during the scientific programs of the year.

The Society resumed a pleasant pre-war custom this year by holding a social evening of dinner dancing attended by members of the Society and their wives.

At the year's end, plans are under way for the adoption of a health and accident insurance program and a group malpractice program.

Officers elected to serve for the coming year are: Dr. W. A. Winn, Springville, President; Dr. Wiley Zinc, Tulare, Vice-President, and Dr. Debora Pineles, Visalia, Secretary-Treasurer.

DEBORA PINELES, *Secretary*

FIFTH DISTRICT

Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz Counties.

R. Stanley Kneeshaw, San Jose, *Councilor.*

Monterey County Medical Society

The Monterey County Medical Society concluded a successful year with the 1948 election of Drs. J. B. McCarthy, president; F. H. Smith, vice-president; W. F. Coughlin, secretary, and A. L. Wessels and H. Clark as delegates.

Thirteen new members were admitted to the Society. Five members were dropped and two were transferred. The deaths of Ralph Pray of Salinas and Ralph Workman of Pacific Grove leave vacancies that time and doctors will be unable to fill.

The previously high standards of the scientific programs were maintained in the Society's good fortune as having as guest speakers: Dr. L. D. Howard, "Surgery of the Hand"; Dr. Loren Chandler, "Malformations of the Intestinal Tract"; Dr. Carleton Mathewson, "Carcinoma of the Colon"; Dr. Norman Freeman, "Peripheral Blood Flow"; Dr. Phillips Tygeson, "Ocular Manifestations of Systemic Disease"; and Dr. Max Waters, "Bone Tumors."

An increasing interest in Medico-Economic affairs resulted in additional well-attended meetings on the subject of California Physicians' Service and the State Survey of Hospital Facilities with Drs. Sidney Shipman, Lynn Cooley, and Milton Halverson as speakers. A highlight of the year was the address of Dr. John Ellis of the Monterey County Hospital on the Medical aspect of the occupation of Austria. Spirited discussions in an atmosphere of unqualified friendliness have marked the year 1947 as a banner one in the history of our Society. Respectfully,

F. HILTON SMITH, *Secretary*

San Benito County Medical Society

The San Benito County Medical Society has six active members and due to the small membership has been inactive during the last few years. A reorganization meeting was held January 21, 1948, with the election of Eberle C. Sheldon, president, and Roswell L. Hull, secretary, for the current year. Meetings are to be held monthly, on the first Wednesday of each month.

JOHN J. HARUFF, *Secretary*

San Mateo County Medical Society

Our Society has grown to 163 active members. The Hospital District has been formed in the southern part of the county (Sequoia Hospital District) and has already been voted the necessary money and bonds to proceed with construction. Another district has been formed for the northern and central part of the county (Peninsula Hospital District). If the plans go through as anticipated we hope to break the "bottle neck" of our bed shortage.

The postwar period has begun to smooth out and we are getting more acquainted with the new men that have come into our Society.

ALBERT G. MILLER, *Secretary*

Santa Clara County Medical Society

In May of 1947, the Santa Clara County Medical Society began its second year of operating a full-time business office and a full-fledged public relations program. The efforts of the Society's officers have been vigorous in developing a long-term program, well balanced, first in its values to the public's health and economic welfare, and second in its values to the Society's own members. The benefits of such activities are already proving their worth.

As the second year of the program began, the business office was moved to greatly expanded quarters on the 11th floor of the San Jose Medico-Dental Building. These facilities now house the Society's library, the Bureau of Medical Economics and the Society office. Employed personnel numbers six. During the year, an active part was taken in some phase of the Society's work by more than 84 different members.

The work of our Santa Clara County Bureau of Medical Economics—which was fundamentally created to do a job of public relations for medicine—has been very successful; first, in doing that public relations job with a vast majority of the 8,000 patients' accounts turned over to it, and second, in collecting over $40,000 cash. The statement "stickers" as developed by our Bureau office and also used by the San Francisco and Oakland branches of the Bureau, have been conservatively estimated as recovering a minimum of $500 per doctor per year—or a gross of $90,000 per year for those members who are actively using the Bureau. This figure is six times greater than the total Society membership dues paid for the first year to get our present program started. Without the aid of outside personnel, the Bureau, for local doctors, recovered funds from 67 cities in 19 states and 3 foreign countries.

We have two special committees that are just starting out on some very important projects. One is our committee on "Central Emergency Hospitals" and another the "Medical Society Building Committee."

Membership in our Group Health and Accident Insurance and in the Society's Blue Cross Plan has substantially increased. Cash payments totaling $4,093 have been paid to the Society members on the Sickness and Accident Insurance.

Fifty-one members have assisted at drawing 2,011 pints of blood at 83 Blood Bank sessions this year. Dr. Threlfall has been responsible for this committee and has done a splendid job—despite the many complications which have plagued the committee during this initial year.

The Society's expressed guarantee to see that *no one* in this county need be without medical care because of any inability to pay for it has been called upon at least 25 times during the past year and doctors who were asked to help out have been extremely cooperative. This Society policy has been made known to all local social and civic agencies. The small number of demands made upon the Society, is in a fair degree, a significant measure of *how few* people there are that are going without proper medical care in this county.

The Society now has its own radio program every Tuesday evening over Radio Station KEEN. Each broadcast highlights some aspect of the advances made by modern medicine in providing greater care and sickness prevention for more people. This Society is deeply appreciative of the splendid aid given it by the Los Angeles County Society in turning over the original scripts for their program "If They Had Lived Today." Scripts are enacted locally by San Jose State College drama students.

The Society was instrumental in working with the San Jose Chamber of Commerce in developing an entire section devoted to health exhibits at the County Fair. This year's efforts were only a forerunner, incidentally, of what is planned and may be possible for next year. In the Society's booth over 5,000 pieces of literature regarding Voluntary Health Insurance were distributed.

A comprehensive local advertising campaign on the subject of Voluntary Health Insurance enrollment has already been prepared and will make its appearance after the first of the year if funds are made available for it.

This year the Society business office staff talked with 84 doctors who wanted to open practice in this county. (That's one new man every fourth day.) Fifty-nine entered their application for membership—47 have already been elected, 12 are still pending. Our total membership now stands at 287.

At the December membership meeting high praise was voiced for outgoing President J. B. Josephson, for his splendid year of leadership.

LESLIE B. MAGOON, *Secretary*

Santa Cruz County Medical Society

Under the able leadership of Doctor Luther Newhall of Santa Cruz this Society enjoyed a very successful year. Six regular meetings were held at bimonthly intervals. All meetings were dinner meetings. In January Dr. Jesse L. Carr of San Francisco presented an interesting and timely paper on Interpretation and Misinterpretation of Certain Laboratory Tests. In February a special meeting was called for the purpose of discussing health insurance. Guest speakers included Mr. Ben Read, Dr. Sidney Shipman, Councilor Stanley Kneeshaw, State Senator H. Ray Judah and our Assemblyman, Donald Grunsky. The so-called Warren Health Bill was the main subject for discussion. In March we were addressed by Dr. Samuel H. Hurwitz of San Francisco on the subject Allergy in General Practice. The May meeting included an address by Dr. Frederick Rodenbaugh of San Francisco on the Bikini bomb tests and included official navy motion pictures. Dr. Stanley Johnson of San Francisco was with us in July and presented a paper on Surgical Conditions of the Stomach and Duodenum. A very interesting presentation of the subject Dermatology in General Practice was made by Dr. Rees Rees of San Francisco in September. The November meeting was given over to Dr. Robert Wartenberg of San Francisco who spoke on the subject of Neurology. The annual business meeting was also held in November and officers were elected for 1948.

SAMUEL B. RANDALL, *Secretary*

SIXTH DISTRICT

San Francisco County.

Edwin L. Bruck, San Francisco, *Councilor.*

San Francisco County Medical Society

The most important event for the San Francisco County Medical Society last year was the resignation of more than 900 doctors, representing 92 per cent of the panel of the San Francisco Health Service System, after a 10-years' trial of the only compulsory system of health insurance for municipal employees in the United States.

The Health Service System proved conclusively that socialized medicine is bad medicine for the public and the profession. Bureaucrats interfered with doctors and their patients, dictating to physicians how they should treat their patients and attempting to force them to practice second-class medicine upon city employees. Laymen dominated the management. The H.S.S. was an accurate forecast of all the evils with which medicine is threatened nationally, and which actually happened here in San Francisco!

The preoccupation of San Francisco doctors during the war caused them to overlook the iniquities of the System, but in May 1947 a letter written by the medical director of H.S.S. forced the doctors to act. Because H.S.S. was again in financial difficulties, the doctors were advised to lower the quality of medical care for the 17,000 city employees, by limiting laboratory tests, by curtailing x-ray examinations and disregarding normal diagnostic procedures.

In spite of the fact that the System's rates to its employed members had been increased by 21 per cent and the unit value paid to doctors dropped by 20 per cent, the

letter confessed that H.S.S. was actuarially unsound and could not keep its commitments and that the medical profession would have to deny employees the high standard of care provided their private patients.

The doctors of San Francisco refused to gamble with the health of their patients and demanded that the H.S.S. accept the following policies:

1. Make provision for members to obtain medical care from their own physicians.

2. Permit members to join a voluntary health insurance system with indemnity cash payments.

3. Permit the enrollment of H.S.S. members as members of a voluntary medical and hospital service plan which would provide them with health care in time of illness.

The H.S.S. Board rejected these proposals and this Society then filed resignations of 902 professional staff members of the System.

Subsequent meetings between the Society and the H.S.S. Board failed to bring about a settlement.

On January 2 it was made known that the H.S.S. Board refused to arbitrate unless resigned doctors return to the panel and, although this Society agreed to recommend to all doctors in San Francisco that they adhere to the H.S.S. fee schedule which was in effect prior to their resignation for the full two months duration of arbitration, the H.S.S. Board rejected the Society's proposal.

The H.S.S. laboratory experiment in socialized medicine has confirmed that when compulsion is employed to bring doctor and patient together, the quality of medicine deteriorates and patient and doctor alike become pawns in the hands of bureaucrats.

In 1947 membership in the San Francisco County Medical Society was the highest reached in any year of the Society's existence. A grand total of 1,375 members was listed as of December 1, 1947 and substantial numbers of applications are reaching headquarters each month from excellent young doctors from all over the country who have decided to practice medicine in San Francisco.

Last spring and summer the Society waged a vigorous drive against a very inequitable tax to be levelled against the professions. Here again the medical profession's unity of purpose was clearly demonstrated, and the Society spearheaded a campaign in which all professional groups from architects to veterinarians took part. The proposed tax was tabled by the Finance Committee of the Board of Supervisors, thus saving the doctors of San Francisco an estimated $60,000 a year.

A highly successful series of orientation lectures given applicants for membership in the Society started this year. They proved to be of great value in teaching younger doctors the ethics and principles of organized medicine.

The Bureau of Medical Economics operated all last year and showed consistent progress throughout. A report prepared by independent certified public accountants showed that the Bureau paid doctor-members nearly $20,000 during the first 10 months of operation.

That sum represented many old accounts that had been returned by commercial collection agencies as uncollectable, as well as many delinquent accounts that the doctors had failed to collect.

Voluntary Health Insurance Week was held in San Francisco in May 1947, heralded by a proclamation of the Mayor. The week was sponsored jointly by the California Committee for Voluntary Health Insurance and the San Francisco County Medical Society.

Newspapers accorded excellent publicity support to the project and a comprehensive program of newspaper and radio advertising was scheduled and paid for by the Committee.

Two outstanding entertainment events were initiated by the Entertainment Committee: Old-Timers Night, held Tuesday evening, April 2, and a Cocktail Party, held Friday, November 14.

During the year studies were undertaken with a view to either disposing of the library or improving it so that its usefulness might be enhanced. At the October meeting, the Board approved presentation of the library as a gift to the Stanford Lane Hospital and the University of California in San Francisco and Los Angeles. Representatives of the two universities are currently engaged in cataloguing the library for its division and disposition.

The Society's telephone referral service continued to grow, averaging some 3,000 calls a month. Inquiring patients were given adequate information in a complete and courteous manner. In addition, by referring the public to ethical, competent, reliable physicians, the Society rendered a definite service to the public by protecting their welfare.

Newspapers and radio stations were assisted in obtaining accurate information on scientific subjects. Approximately 25 inquiries were received from newspaper men and every effort was made to furnish them with the facts they requested. All inquiries by newspapermen can be referred to the Society headquarters, thus saving time and possible embarrassment.

The Society continued to give every support to the Woman's Auxiliary and that organization has been of invaluable assistance in many ways.

Further improvements were made in the format and content of *The Bulletin*. The size was increased and editorial matters accordingly expanded. Readability was enhanced by the use of cartoons and illustrations. Every effort was made to make *The Bulletin* truly representative of the membership and read by every doctor who belongs to the Society.

Arrangements for the establishment of minifilm chest x-ray facilities at the Society's headquarters in 1948 have been made with the Tuberculosis Association. Under the plan referral slips will be made available to all members of the Society which would entitle patients to free chest x-rays.

An amount of $13,737 was disbursed by the Special Service Fund Committee to 28 doctors who had seen active service in World War II.

ROBERTSON WARD, *Secretary*

SEVENTH DISTRICT

Alameda and Contra Costa Counties.
Donald D. Lum, *Councilor.*

Alameda County Medical Association

The Alameda County Medical Association is now meeting its full responsibility to medicine and the public. It has achieved most of the objectives outlined by its executive secretary and approved by the members of the Association in 1945.

Through its Bureau of Medical Economics, the Association has removed the commercial bill collector from the economics of medicine, has improved the physician-patient economic relationship, and has published and delivered its guarantee of a universal distribution of medical care to all of the people of Alameda County. Advertisements appear regularly in the daily press, explaining the economics of medicine, and offering proof of the Association's contention that there is no need for a change in the economic relations of physicians and patients. Radio programs and the other lesser forms of publicity will follow. Voluntary health insurance is being actively promoted.

Militant ethics and fee complaint committees guard the public interest and prevent the embarrassment of the ethical profession as a whole by the minority who are too short-sighted to place the good name of their profession ahead of immediate personal gain. Financed in part by the California Medical Association, the Bureau of Medical Economics is analyzing thousands of cases of broken and unsatisfactory physician-patient economic relations to determine and remove the causes of public dissatisfaction with the economics of medicine, which is still an individual matter between physician and patient and must be so treated if it is to be preserved. This is organized medicine's first scientific approach to "consumer relations" research.

The Association has assumed aggressive leadership in the promotion of a public health district and more hospital beds.

The Blood Bank of the Alameda County Medical Association is the first in California to evolve a system whereby blood is immediately available to every patient without question as to payment or replacement prior to transfusion. The bank is financially solvent and always has on hand the type and amount of blood needed for every case.

The Bulletin of the Association was rated by Dr. Vincent Williams, dean of County Medical Society editors, as one of the four best in the nation.

The American Mutual malpractice program, conceived and proved in Alameda County, has saved members nearly $100,000 in premiums. But, more important, its prevention program, tied in with the Association's public relations work, has *thus far* been 100 per cent successful in that there have been no suits or claims.

The Association and its various agencies now have 32 full-time employees. Its business ventures are by far the least important of its activities, yet far more than a quarter of a million dollars is the measure of its gross business. We are approaching a point where the writing of a book will be required for the secretary of this Association to answer a request for a report of its activities. And, perhaps, a book it shall be, with the title: "A Successful and Effective County Medical Society Program."

DOROTHY M. ALLEN, *Secretary*

EIGHTH DISTRICT

Alpine, Amador, Butte, Colusa, Eldorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo, and Yuba Counties.

Frank A. MacDonald, *Councilor.*

Butte-Glenn Medical Society

As the name indicates, the Butte-Glenn Medical Society covers two counties and the distances vary from 20 to 30 and 40 miles for the members to travel and attend meetings. Nevertheless, out of approximately eight meetings, the attendance has varied around 30 and at times has been 35. We have met in Oroville, Gridley and Chico.

It is our custom to have a dinner meeting attended by the wives, who are members of the Women's Auxiliary and their membership is almost 100 per cent. Following our dinner, the ladies adjourn and hold their own meeting and have a social visit.

We have been very fortunate in having been able to secure excellent speakers from San Francisco, Oakland, Sacramento and Los Angeles.

Our Society has taken an active interest in tuberculosis, heart and cancer and have active committees working with these organizations. So we feel our Society is functioning 100 per cent and that its work is progressive and that we are a stabilized unit that commands the respect of our communities.

J. O. CHIAPELLA, *Secretary*

Yuba-Sutter-Colusa Counties Medical Society

The Yuba-Sutter-Colusa County Medical Society ("The Biggest Little Society in the State of California") has just concluded a year of unpredictable events. Besides holding nine regular meetings—it has held special meetings too numerous to mention—also members have frequently reported attending outside County Medical Meetings. We have also invited the membership of neighboring societies to attend our meetings and have been gratified on the fine showing. We have frequently had news reports in the local press regarding these meetings.

Dr. Francis P. Wisner served as program chairman during 1947 and he had the privilege of presenting such outstanding guest speakers as:

1. Frederick N. Scatena, M.D., of Sacramento, Secretary-Treasurer of the Board of Medical Examiners. Dr. Scatena presented a paper on Diabetes and discussed function of Board.

2. Norman Freeman, M.D., Associate Professor of Surgery, University of California, discussed Peripheral Vascular diseases.

3. Dr. James Shumate discussed nailing hip fractures.

4. Dr. Larsen and Mr. Balentine of C.P.S. appeared before our Society at a regular meeting, and we could ask plenty of questions that they could not answer. We are cooperating, we do not plan to disaffiliate.

5. Gerald L. Crimshaw, M.D., Oakland, gave an illustrated lecture on the medical and surgical treatment of subacute and chronic Bronchitis and Bronchiectasis.

6. Dr. B. Marden Black of the Mayo Clinic—Surgery of the Thyroid and Parathyroids.

7. Dr. Richard Brown, of University of California, discussed Urinary Antisepsis.

8. Dr. Francis L. Chamberlain—Hypertensive Diseases.

9. Dr. Frank A. McDonald, Councilor 8th C.M.A. District.

Regarding special sessions. I would like to explain that these were almost entirely pertaining to the hospital situation in the local community, which has now been quite successfully worked out to the satisfaction of all concerned. About twenty hospital bed units are now under active construction. The Hospital Relations Committee and the members of the Society spent many hours conferring together with the Yuba County Board of Supervisors and finally worked out a highly satisfactory plan—whereby a resident physician is employed at the County Hospital chosen by the Medical Society and hired by the County Board of Supervisors with about twenty members of the County Medical Society cooperating as attending men and consultants. This has been worked out to a high degree of perfection—and all is calm and orderly and well operated at the Yuba County Hospital. Ward rounds and Clinical Conferences are held each Friday noon at the Yuba County Hospital—a luncheon is served, which always insures a good attendance. Visiting physicians in Marysville are cordially invited to attend these county hospital conferences.

A General Practitioners Section which was organized in 1946 has held several interesting meetings. The officers for 1948 are: Chairman, Robert L. Hamilton, M.D.; Vice-Chairman, Francis P. Wisner, M.D.; Secretary-Treasurer, Glenn E. Blackwelder, M.D.

For a number of years the Yuba-Sutter-Colusa Medical Society has encouraged the attendance at the summer camps of Boy Scouts, Girl Scouts, Camp Fire Girls, etc., by extending the courtesy of free pre-camp physical examinations. Accordingly, a notice to this effect was published in the local press early in the summer.

We lost one member, Dr. Pieter Samson, who died suddenly August 11, 1947, of a heart attack.

The welfare of the Yuba-Sutter-Colusa County Medical Society for 1948 will be in the hands of our lady physician, whom we have decided to honor with the presidency, Dr. Ermorine Edwards; Vice-President, Benjamin F. Miller, M.D.; Secretary-Treasurer, Leon M. Swift, M.D.

We are expecting 1948 to be a most important year.

LEON M. SWIFT, *Secretary*

Sacramento Society for Medical Improvement

Organized in 1868, the Sacramento Society for Medical Improvement meets on the third Tuesday of each month, except during July and August. Meetings are held, alternating yearly, in the Auditorium of Sutter Hospital and of Mercy Hospital. The December meeting is devoted to business and the election of officers.

The following programs were presented during 1947.

January: Drs. Wm. VanDenBerg and Howard Black discussed certain neurosurgical problems, and Dr. Wm. McCarthy talked on the work of the Cancer Committee.

February: Dr. Curtis Smith of San Francisco discussed various aspects of Blood Bank organization and operation.

March: Annual Banquet.

April: Dr. Norman Freeman of San Francisco gave a paper on Thrombo-Embolism.

May: Dr. Franklin I. Harris of San Francisco discussed the role of intubation in intestinal obstruction.

June: Dr. Roland Davison of San Francisco gave a paper on the treatment of arthritis.

September: Dr. William Neff of San Francisco spoke on certain aspects of anesthesiology.

October: Dr. Carleton Mathewson of San Francisco discussed Carcinoma of the Pancreas.

November: Dr. Herbert F. Trant of San Francisco gave a paper on Vaginal Smears and Carcinoma.

December: Annual Business Meeting.

The Society has 209 active members, and one honorary member. Two died during the year, Drs. James E. Murphy and Herbert F. True. There are six retired members.

EDMUND E. SIMPSON, *Secretary*

The Shasta-Trinity County Medical Society

The Shasta-Trinity County Medical Society has 23 members. Three men will be eligible for membership in the next month or so and one man is requesting transfer from another society.

The County Medical Society holds its regular meeting on the second Monday of the month, except during the summer months of July and August.

JULIUS M. KEHOE, *Secretary.*

Tehama County Medical Society

The Tehama County Medical Society at its regular meeting, January 27, 1948, elected the following officers for this year: R. G. Frey, M.D., President; James T. McDuffie, M.D., Vice-President; A. H. Meuser, M.D., Secretary and Treasurer. Dr. O. T. Wood was elected delegate and Dr. R. G. Frey, alternate.

A. H. MEUSER, *Secretary*

Yolo County Medical Society

During the year 1947, the Yolo County Medical Society established a Tumor Clinic in Yolo County, which has been active now for a year. The procedure to be followed is that only patients seen by their physician can be presented to the Board. The physician will give the history and physical findings. The Tumor Center is open to all people regardless of financial status.

A Cancer Clinic was arranged and will be held in January of 1948, along with its refresher course. Monthly meetings, except for July and August, were held with prominent speakers from various parts of the state taking an active part.

New members admitted were Drs. Robert Brundage, Theodore McCarthy, and F. J. Peters. Transfers from this Society were Drs. John Gray, W. D. Garcelon, G. R. Laird, and Wilfred Robbins.

HENRICK S. GRAESER, *Secretary*

The Lassen-Plumas-Modoc Medical Society

The Lassen-Plumas-Modoc Medical Society held two meetings during the past year. President W. C. Batson arranged a very excellent program of speakers. At a winter meeting in Susanville, Dr. Ernest W. Mack and Dr. Kenneth Maclean, both of Reno, spoke to us. At a spring meeting in Greenville, Dr. Hardgraves and Dr. E. L. Bruck, both of San Francisco, spoke to us. Meetings are all called by the president.

J. PAUL MCKENNEY, *Secretary*

Placer-Nevada-Sierra County Medical Society

There were a total of eight meetings during the year.

1. The annual meeting was held at the Freeman Hotel, Auburn, Calif., on November 9, 1946. The present officers were retained for the ensuing year as follows: President, Paul D. Barnes, Loomis; vice-president, Harry N. March, Grass Valley; secretary-treasurer, Vernon W. Padgett, Grass Valley. Delegate to C.M.A., Wm. M. Miller, Auburn; alternate, C. E. Lewis, Auburn. Visitors to the meeting were Dr. John Dement and Dr. Ellis Sox both of the State Department of Health, both of whom discussed matters pertaining to the public health. Dr. Sox discussed the Forrest Hill Public Health Project and reviewed the accomplishments of their clinics. Dr. G. D. Tipton offered DeWitt Hospital as a place for subsequent meetings for our Society and invited the members for dinner on December 12, 1946.

2. Meeting December 12, 1946 at DeWitt Hospital at which time members were the guests of Dr. G. D. Tipton, superintendent of that institution. Twenty members and 11 guests were present. Dr. Lynn Smith of Colfax was in charge of the program and had as guest speaker, Dr. Schuyler Pulford of Sacramento who talked on Diabetes, Diet and Insulin in Uncomplicated Cases. This was a very instructive talk for the general practitioner and Dr. Pulford pointed out pitfalls, methods of diagnosis, calculation of diets, tests of various kinds, and when to use insulin and when not to use it.

3. Meeting January 23, 1947 at DeWitt Hospital, Auburn. Twelve members and guests were present. Two guests from the Farm Bureau discussed a group coverage Health Insurance Plan sponsored by the Farm Bureau. Dr. John W. Ballou and Dr. Walton Prescott both of Grass Valley were elected to membership in our Society. Short case discussions were given by the following members: Dr. Conrad Briner, Auburn, Hypoglycemia; Dr. Bernard Hummelt, Nevada City, Premature Separation of Placenta; Dr. Lynn Smith, Colfax, Industrial Coronary Occlusion.

4. Meeting March 6, 1947 at DeWitt Hospital, Auburn. Twelve members and seven guests were present. Dr. Frank M. Olrich of Auburn was elected to membership. Dr. Max Dunievitz of Auburn introduced the speaker of the evening, Dr. Paul Guttman of Sacramento whose subject was the Rh Factor. Dr. Guttman discussed the basic principles, clinical manifestations, treatment, prophylaxis, and significance of the Rh factor.

5. Meeting April 10, 1947. DeWitt Hospital, Auburn. Nine members and seven guests were present. One of the guests was Dr. Frank A. MacDonald, District Councilor from Sacramento who discussed the Farm Bureau Federation Health Insurance Program. Dr. Robert Eveleth, Roseville, program chairman, then introduced the guest speaker, Dr. Adolph T. Agaard of Sacramento. Dr. Agaard spoke on Coronary Heart Disease and gave a very instructive talk outlining the disease from anatomical and clinical points of view ending with a thorough outline of treatment.

6. Meeting May 15, 1947. DeWitt Hospital, Auburn. Ten members and two guests present. Dr. Waldo H. Pate was accepted into our Society. Dr. Norbert Frey of Nevada City introduced the guest speaker, Dr. Arthur Koepsell, Sacramento, who spoke on Obstetrical and Gynecological Problems.

7. Meeting June 17, 1947. DeWitt Hospital, Auburn. Eleven members and six guests were present. The program was in charge of Dr. G. D. Tipton and given by members of his staff at DeWitt Hospital. Mental disease in the U.S. was discussed in a general way and from there specific types of disease were taken up, a demonstration of electric shock treatment being shown the members and guests. Dr. Tipton, medical superintendent of DeWitt Hospital outlined the organization of the State Hospital System and the State Department of Mental Hygiene.

8. Meeting October 15, 1947. DeWitt Hospital, Auburn. Sixteen members and six guests were present. Dr. Louis Jones, Roseville, introduced the guest speaker, Dr. Frank A. MacDonald, Sacramento, Councilor of the Eighth District of the C.M.A. who talked to the members on "What's Going on and What We Might Expect in Medicine" from a political point of view. He took up the background of the Warren Compulsory Health Plan, State Board of Health Measures, the Taft Bill, the Murray-Wagner-Dingell Bill, Prepayment Medical Plans, etc. Public Relations activities of the C.M.A. were also discussed.

VERNON W. PADGETT, *Secretary*

NINTH DISTRICT

Del Norte, Humboldt, Lake, Marin, Mendocino, Napa, Siskiyou, Solano, Sonoma, and Trinity Counties.

John W. Green, Vallejo, *Councilor.*

Humboldt County Medical Society

The year of 1947 saw an increase of approximately 15 per cent in the number of physicians in practice in this County. It is expected that these new men will all soon be members of the Society.

The Society held a number of interesting dinner meetings during the year and it has been noted that this type of meeting draws the largest attendance.

Three new hospitals for the county are in the process of development, one in Fortuna and two in Eureka. These new facilities will be greatly appreciated by the Society members.

Plans are under way for the establishment of a Memorial Scholarship Fund honoring the Society members who lost their lives during the recent war.

Death has taken two of our members during the latter part of the year, Dr. C. C. Falk, Sr. of Eureka and Dr. Rupert V. Hauser of Scotia.

JOHN S. CHAIN, *Secretary*

Napa County Medical Society

The Napa County Medical Society had a successful year under the presidency of Dr. T. K. Miller. Membership, (including retired) is now 45. The Society greatly regrets the death of Dr. A. S. Oliver, long a member. Meetings were regularly held; well attended and instructive speakers were provided. National issues such as socialized medicine were presented and discussed, State proceedings were ably reviewed by Dr. John Green of Vallejo, Dr. Dwight Murray of Napa and others; matters of local concern, including the cancer drive, public health, etc., were energetically pursued. The annual meeting was held at the Yountville Veterans Home with Colonel Holderman and his medical staff as able hosts. Officers elected for 1948 were: President, Dr. Walter H. Brignoli; vice-president, Dr. M. M. Booth; secretary-treasurer, Dr. C. C. Caulkins. Meritorious mention was accorded Dr. Booth who served the Society well as its secretary-treasurer for the past 18 years.

C. C. CAULKINS, *Secretary*

Solano County Medical Society

The Society enjoyed a progressive year highlighted by numerous excellent addresses at the regular monthly meetings by various eminent professional men of this vicinity.

During the January meeting there was a discussion of the purchase of the Vallejo Community Hospital. In February the Vallejo General Hospital Corporation was formed, open to all members of the Society, after it was found impractical to purchase the Vallejo Community Hospital. Also at that meeting Mr. Raymond Taibl spoke on the recent advances in the treatment of cerebral palsy.

At the regular meeting in March, Dr. Herbert Lawrence addressed the Society on the subject of Penicillin Treatment in Dermatology.

The April meeting lecture was given by Dr. Klein, Proctologist, of Stanford University, who spoke on Carcinoma of the Colon and Rectum.

The Society held its regular June meeting, a dinner-social, at John's Place in Benicia at which time the group adjourned for the summer.

At the September meeting Dr. Dallas, Professor of Obstetrics at Stanford University, gave a very interesting and comprehensive lecture on Obstetrical Emergencies.

The Society was addressed in October by Mr. Thomas O'Dea, local representative for C.P.S. in this community, who reported the continuing progress of C.P.S. His talk was followed at the November meeting by Dr. Larsen, Medical Director of C.P.S., who spoke on the present status of C.P.S. and the place of the Veterans Program in that organization.

At the December meeting officers for the following year were elected:

President, Dr. Felix Rossi; Vice-President, Dr. Charles H. Widenmann; Secretary-Treasurer, Dr. Bernard V. O'Donnell; and Delegates to the C.M.A., Dr. H. Randall Madeley and Dr. Felix Rossi.

During the year Dr. J. J. Couperus transferred to the Sacramento County Medical Society, and Dr. Clark T. Alexander and Dr. N. J. Crisp passed away. Drs. Carl Reichman, William J. Olsen, Albert Cohn, and Harry G. Lammel were added as new members to bring the present membership to fifty-seven.

BERNARD V. O'DONNELL, *Secretary*

Sonoma County Medical Society

The membership of the Sonoma County Medical Society now numbers 73. Dr. F. E. Sohler, Sr., of Healdsburg, died on December 29, 1946, following our last report. One member transferred to another County Society and eleven new members were added during the year 1947.

Ten meetings were held during the year, with an increase of approximately 25 per cent in attendance over the previous year. No meetings were held in July and August. The members of the Society were dinner guests of Dr. Butler at the Sonoma State Home in May.

The November meeting was a joint meeting of the Society and the Ladies' Auxiliary, at which time a number of new doctors and their wives were introduced. The program at this meeting was a discussion of cancer by Dr. L. Henry Garland of San Francisco.

RAIMOND F. CLARY, *Secretary*

Marin County Medical Society

The Marin County Medical Society again made a good showing for the year 1947. The present membership is 66. One old member passed away and one left the county. Three members have been accepted by transfer from other societies and three have been accepted on presentation of credentials.

Nine monthly meetings have been held during the year, also one four-county meeting. All were well attended. Good fellowship generally exists in the society.

All the doctors are busy in all the specialties as well as medicine and surgery. The nursing situation is improved somewhat. Fewer special nurses are called than formerly.

The hospital situation continues about the same. Beds are always at a premium. The bond issue which would have built a new hospital failed. This was a great disappointment to all the profession, but it is expected another try at it will be made in the early summer.

The obstetrical situation is about the same. Many of the mothers go home on the 4th or 5th day. Many of the obstetrical cases are taken care of at the Hamilton Field Hospital which helps the situation generally. All the cases are delivered in the hospitals.

CARL W. CLARK, *Secretary*

The Mendocino-Lake Medical Society

At the annual meeting of the Mendocino-Lake Counties Medical Society for the purpose of election of officers, delegates and reports of the various committees, Clemens M. Beil was reelected President and E. C. Bennett, Secretary-Treasurer. Clemens M. Beil was elected as Delegate to the State Convention and David B. Williams elected his alternate.

Our Society consists of twenty members, active, and one honorary member. Eleven of our members served in the military service and all have returned and reestablished their practices.

The Mendocino State Hospital is located in our district and affords us a rare opportunity to study mental illness first hand. The staff of the hospital is probably one of the most capable in the state and many of them are members of our Society, including the Superintendent, David B. Williams, and Assistant Superintendent, Robert Bramcamp.

E. C. BENNETT, *Secretary-Treasurer*